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ATARI INTERFACE MAGAZINE

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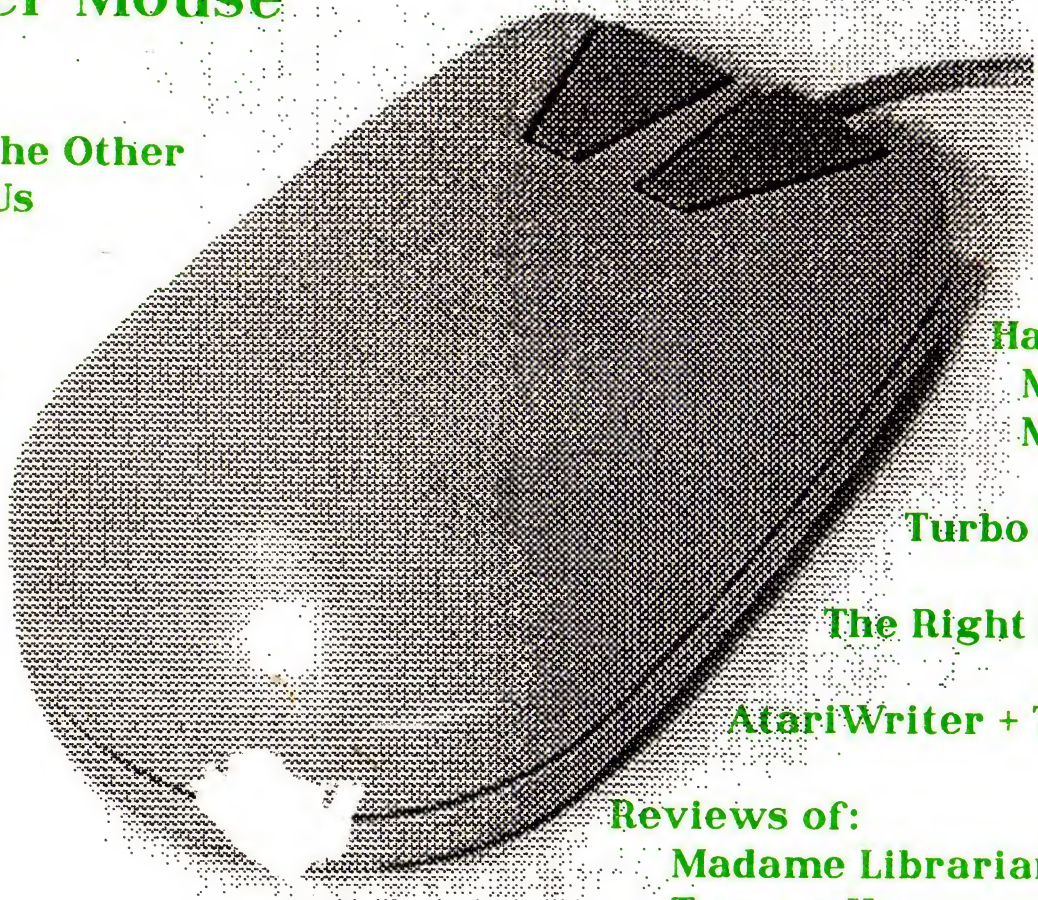
September 1989

Best Builds a Better Mouse



The Way the Other Side Sees Us

NeoSTAG Struck by Virus

Hard Drive Myths and Mysteries

Turbo Info #3

The Right Brain

AtariWriter + Tutorial

Reviews of:
- Madame Librarian
- Tempus II
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The Best Mouse (see review on page 22). Photo courtesy of Best Electronics

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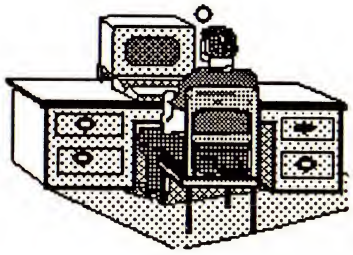

Editorial Ramblings

With the "revolving door" at Atari in full swing again, we thought it appropriate to take a quick look back at all who've come and gone.

Mike Dendo, Joe Mendolio (and secretary) and Chris Roberts have all left Atari in the past two months. Chris Roberts was hired only a short time ago to replace Cindy Claveran, who in turn replaced Sandy Austin. Joe Mendolio was hired a few months ago and Mike Dendo was made Vice President of Sales and Dealer Relations only a few months before that.

Mr. Dendo and Mr. Mendolio were hired to fill vacancies left by Larry Samuels, Tony Gould, Vincent Giammettao and Chuck Babbit. Others to recently leave Atari include Les Player (General Manager of the STacy project), Shiraz Shivji (ST Designer), Richard Frick (Entertainment Division head), Neil Harris (Communications) and programmers John Scrutch and Roy Goode. Cindy and Chris had the distinction of being fired, while all the other people mentioned apparently left of their own accord. Doubtless, there are others who were less publicly know who have also left Atari.

With all of these people leaving Atari, many of them within months of coming aboard and many of them holding key management positions, one is inevitably left wondering about Atari's ability to formulate any plans for the "long haul." How can a company with "short-term management" ever hope to design and implement long-term planning? It is our opinion that Atari's lack of direction and commitment, at least from all outward signs, is a direct effect of Atari's inability to hire and retain quality people in key positions.

The most important question, of course, is this -- why can't Atari keep these quality people on the payroll? Most speculation points directly at the Tramiel family and their peculiar style of management. One on-line personality on CompuServe likened the problems Atari Corp. and the Tramiels are having to troubles faced many years ago by then-family-owned Ford Motor Company and the Ford family.

If indeed many of these executives left Atari due to clashes with the Tramiel family, the Tramiels should look carefully at the devastating effects their "style of management" could have on Atari's future. We've seen a lot of talented, knowledgeable people leave Atari in the past two years. We've also seen an Atari that vacillates from one project to the next with little tangible result. For Atari to overlook or ignore the connection between these observations, or worse, to continue on as if there was no problem within Atari headquarters, could be disaster.

In the computer industry, image is very important. Atari's seeming lack of direction, due in large part to high executive turn-over, is giving Atari a "Keystone Cops" image. If Atari Corp. is ever going to be a credible force in the computer industry, the underlying problems contributing to Atari's poor public image must be resolved.

Bill & Pattie Rayl

From the Reader's Viewpoint

Dear Editor,

Enclosed you will find a check to restart my subscription. I am most interested in your 8bit articles. I think your magazine and Current Notes are the two best Atari publications on the market.

Dave Harris,
Selfridge, ND

PS. Any news on an 80 column version of Paperclip? I have AtariWriter 80 and it is just as pathetic as AtariWriter Plus. The 80 column screen is nice though.

[Editors' Note: Dave, we haven't heard anything about an 80 column version of Paperclip. Sorry that we can't help you, but the column from Jimmy Boyce of CACE may help you get more from AtariWriter.]

The Sniper's Column

In the June issue of AIM, there was a vehement argument between the editors of AIM and Leo Sell of CHAOS/Great Lakes Atari Digest (GLAD) fame. In the ensuing battle of text that followed, we noted that a reference was made to the publications of Z*Magazine and ST Z*Magazine, in which these publications were referred to as Z*Rag and ST Z*Rag.

We at CACE regard these comments as an infringement upon our publication rights, as it is well known that we publish the only "rag" in Michigan. Should such references occur again, we shall consider legal and/or military action against these parties (or we may even give these would-be offenders a dirty look and a nasty innuendo).

Also, we feel that we have not been given adequate magazine space in AIM to express our snipes. And we resent the fact that no one has ever argued with us, or complained in the slightest degree about our articles. As a result, no one reads our articles anymore.

Should anyone wish to bicker, contend, dispute, fight, hassle, quarrel, quibble, squabble, tiff, wrangle, or call us something derogatory, we can be reached through the CACE post office box:

C.A.C.E.
P.O. Box 6161
Jackson, MI 49204

For those of you who would prefer to argue with us online, we may be reached through the CACE BBS at (517) 787-4011.

Thanks for your support.
Tim Sharpe and Brent Fisher

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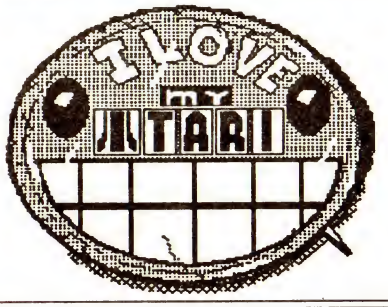


Atari Bulletin Board

by Bill and Pattie Rayl

Things certainly have been happening in Sunnyvale since last month, and not all of the happenings have been good.

Atari's Revolving Door

About a month ago, Joe Mendolio "unexpectedly" left Atari, taking his secretary with him. When asked about the reason for his departure, a credible source within Atari stated that, although they could not discuss why Mr. Mendolio left, "his leaving came as a complete surprise to us."

Also gone is Atari's recently-hired User Group Coordinator, Chris Roberts. According to Atari, Chris was fired, but no details would be discussed. Possibly the STacy "accident" that occured en route to the Dearborn World of Atari show may have had something to do with the firing. Other sources have indicated a possible clash between ST World's Rich Tsukigi and Chris Roberts may have played a part as well.

New User Group Coordinator

The good news here, though, is that Atari has already named a new User Group Coordinator. Bob Brodie, an active User Group supporter and past contributor to the online Z*Mag, replaces Chris Roberts. Atarians who know Bob Brodie personally say he is very capable and an excellent choice for the position.

Finally, in the "revolving door" category, Mike Dendo, Vice President of Sales and Dealer Relations has also left Atari rather suddenly. Again, no word as to why Mr. Dendo left has come from sources within Atari.

Dealers in the Michigan area were very impressed with Mike Dendo on his visits to this area.

Profits Decrease Dramatically

One other bad note before we move on to more positive news.

The August 15 Edition of *The Wall Street Journal* reported that Atari's second quarter profit "plunged 94 percent to $327,000 or one cent a share." Atari reportedly blamed depressed video game sales due to unfair practices by Nintendo and foreign currency rate fluctuations as the cause for such a dramatic drop in profits.

Atari's Color Portable Entertainment System, unveiled at the Summer CES in Chicago, has been renamed. The hand-held game machine is now called the Lynx and it will reportedly be shipping in the next few months.

Portfolios Sold to FedEx

Federal Express has reportedly contracted to buy an undisclosed number of Atari's new IBM-compatible Portfolio. Rumor is that most key executives of Federal Express will be issued a Portfolio. The Portfolio was also on display at the *PC Magazine* Editor's Day held on August 18. Sig Hartmann and other Atari representatives were on-hand to answer questions.

New ST, the ST-E, Announced

According to Matthew Seitz, an employee of Moses Computers and an attendee of the *PC Magazine* Editor's Day event, Sig Hartmann said that the ST-E was available as of mid-August.

It seems from the information given by Sig Hartmann that the ST-E is the "Amiga Killer" we've all heard rumored to be in the works. Mr. Seitz reportedly contacted Gayle Johnson, Atari's Developer Coordinator, who knew absolutely nothing about the ST-E. No dealers who were contacted had heard anything about the ST-E, either.

SIGGRAPH Show

Frank Foster of Atari US and representatives of Atari UK and Perihelion attended the recent SIGGRAPH Computer Graphics show in Boston, MA.

The ATW (Atari Workstation) was being "unveiled" for the first time to the US market. Two ATWs were running, one with 13 transputers running a flight simulator and the other (with only one transputer) showing an array of color demos. Atari's small booth at the show was reportedly getting a lot of attention!

One attendee, Thomas D'Alimonte of Missing Pieces, a software and consulting firm, reported on CompuServe that "The flight simulator was fantastic! The smoothest shaded polygon rendered landscape and plane I've seen in real time.... Nothing short of ILM (Industrial Light and Magic) would be better."

Atari Front Page News

Finally, on the Atari homefront, the front page of the *Detroit Free Press* recently mentioned Atari in their "Sound-off" call-in poll column. The column mentioned that "In the West German branch of the US Computer firm Atari, non-smokers have been given an extra six days of vacation per year to compensate for the cigarette breaks that smokers get."

Glendale Atari Show Cancelled

The annual Glendale Atari Show has been cancelled this year. According to show producer John Tarpinnian, the show will not take place due to ST World scheduling a World of Atari Show in San Jose just two weeks after the Glendale show was set to take place.

Similar to problems faced by the Michigan User Group, MACE, the Glendale sponsors decided to call it quits. "The ST World show cancelled the [Glendale] show," John Tarpinnian informed us.

In the wake of this conflict, ST World has also cancelled the San Jose show, but not soon enough to allow the Glendale Show to continue. "The wheels are in motion," said Mr. Tarpinnian. Dates for the Glendale Atari Show have already been set for 1990 and 1991.

According to an ST World spokesman, no more shows are planned for the rest of this year.

Viruses on the ST

Reports have been coming in concerning a "sleeper virus" or "trojan horse" that has become fairly widespread, at least in the Midwest. Information from User Groups in Michigan, Ohio, Illinois and even Ontario, Canada indicate that this virus may be reaching epidemic proportions. Although this "sleeper" does no damage, ST owners are urged to wipe this virus out before someone creates an accompanying "key disk." For more information on this virus, see the article "Neo STAG Struck by Virus" elsewhere in this issue.

Across the pond, a particularly nasty virus has been discovered in pirated copies of Leisure Suit Larry. Sierra On-Line, producers of the game, reported on the virus in their Spring '89 issue of the Sierra Newsletter. According to the Financial Times (London, November 30,1988), the virus "copies itself to the hard disk. After a pre-determined time or a certain amount of use, the virus obliterates any data stored on the hard disk." The virus has been reported in Switzerland, Germany, The UK, The Netherlands and has even reached the US. Most notable, the virus reportedly infected hard drives on the Dutch government's network and has hit a number of banks and trading houses in London. Sierra On-Line has stated their absolute assurance that "software leaving our plant does not contain any virus."

New Products

Very soon, ST gamers are going to be able to purchase a game that is guaranteed to be a smash hit. Bloodwych, soon to be released from Mirrorsoft of the UK, can only be described as "two-player Dungeon Master." With game-play and graphics similar to FTL's bestseller, Bloodwych is sure to be a big seller. The game allows two players to each recruit a party of four to explore Castle Bloodwych. The object of the game is to find the four crystals in the castle's towers, bring them together in the center of the castle and defeat the horrible Bloodwych. According to Mirrorsoft, the ST version of the game should be available by the time you read this. For an excellent, playable demo of Bloodwych, contact your local User Group or download the demo from the major on-line services.

A Colorado-based company called Maxwell CPU has announced release of the GoGo ST, a program similar to CodeHead Software's Hotwire. At a retail price of $34.95, GoGo ST allows ST owners to create lists of programs and then execute the programs with a single mouse click. GoGo ST also has the ability to keep track of how much time you spend in each program. Also available from Maxwell CPU is a product called MegaSTender, an "extension cord" for your Mega ST keyboard. The MegaSTender comes in 6, 8, 12 and 25 foot versions, and the 25 ft length starts at $24.95. For more information, contact Maxwell CPU, 507 W Baseline, Lafayette, CO 80026 or (303) 665-4849 voice or BBS at (303) 666-4470.

K-Products of Salt Lake City, Utah recently bought rights to produce and market an 8bit hard drive interface for Supra hard drives. The K-P Hard Drive Interface is available from K-Products, 4267 W. Midway Dr, Salt Lake City, UT 48120.

XL/XE owners who have been wanting to add a light gun to their system can now purchase a light gun from BEST Electronics. The gun offered by BEST is fully compatible with the new light gun cartridges, comes with a 9 foot cord and retails for $34.95.

For the ST (and XL/XE) computers, BEST Electronics has begun shipping the BEST Mouse at a retail price of $49.95. For a review of this new mouse, see elsewhere in this issue. For ST owners with a Taiwan-made mouse, BEST is offering an upgrade called Mouse +. This kit replaces the current photo-optic interruptor shafts in your mouse and adds Teflon rollers for smoother, near maintenance-free operation. BEST Electronics, 2021 The Alameda, Suite 290, San Jose, CA 95126 or (408) 243-6950.

If you're an owner of any 8bit Atari machine and you're looking for some of the older, hard to find software/cartridges or books for your computer, chances are that American Techna-Vision has what you need. American Techna-Vision carries many hard to find items and even stocks 8bit motherboards, chips, accessories and Sam's ComputerFacts manuals. In fact, they have "one of the world's largest inventories of Atari 8bit material." For a catalog or more information, contact American Techna-Vision, 15338 Inverness St, San Leandro, CA 94579 or (800) 551-9995.

Last, but not least, is a newsletter now available for all ST desktop publishers who want to get the most from their machines and software. DeskTop Publishing:Atari Style gives useful tips for the most popular DTP programs and reviews of new products that make the desktop publisher's job easier. This newsletter will be a great help to the novice who wants to learn the fundamentals of typography, publication design and page layout. The power DTP-er should also find the newsletter useful. Six issues are only $9.95. Contact E&L Productions, 27 Cedar Hill, Sumter, NC 29154 or call (803) 494-2201.

Turbo-Info # 3

What is the Turbo-OS and What Does It Do?

by Chuck Steinman (DataQue)

This is the third part of a multi-part information article on the Turbo-816 from DataQue Software for the Atari XL/XE computers. The previous installments went over the basic system and the memory, and this article will explain some of the unique functions of the Turbo-OS.

What is Turbo-OS?

Some background on the Turbo-OS for those of you which have just tuned into the AIM Channel #816.... The Turbo-OS is an operating system for the Atari XL and XE computers which either can fully replace the Atari OS you now have or be used in addition to the Atari OS. The latter application requires the addition of a toggle switch to allow for user selection of which Operating System is active. A version for the 800 computer will be offered also. The Turbo-OS will only operate in systems with the Turbo-816 CPU adapter card installed.

My original intent was to have both the Atari OS and the Turbo-OS in one PROM. This would have reduced the amount of hardware needed and simplfied installation.

Due to my not being able to aquire an acceptable agreement for the Atari OS, the Turbo-OS is a seperate PROM, without the Atari OS included. This results in an additional 28 or so solder connections if the "Dual-Prom" option mentioned above is installed. Another option is to use one of the commercially available OS switchers, which include a PC board with multiple OS sockets and a selection switch.

There are two sections to the Turbo-OS, the normal CIO/SIO system interface and the new user interface. The latter is a menu system which allows the user to perform many new unique features. Also there are many new CIO vectors, which perform memory management and system control functions.

The Turbo-OS menu features include the following:

- A non-interactive NotePad mode which is similar to the Atari 400/800 memo pad mode. While not too useful, kids get a kick out of it, and it does come in handy for certain applications.
- A full 16 megabyte hexidecimal and ATASCII dynamic memory dump utility. This will continuously dump the contents of a specified block of memory to the screen. There are several command keys to make moving about the large addressing range a breeze.
- A system configuration key, which will scan the addressing range of the Turbo-816 for applications and memory. If applications are found, they are installed into a menu, where they can be executed by a key selection. Up to 8 of these applications can exist.
- There is a memory option to clear areas of RAM including: Standard RAM, Banked RAM (extended), Application RAM (explicit), and Expanded RAM. There are several options as to exactly how the RAM is cleared.
- There are many built-in keyboard "hot" keys which can be made active from the Turbo-OS menu. An indictor shows the current status of the hot keys. These keys will allow the cursor to move about the screen quicker, and turn the video, key-click, and SIO noise on and off. Also key repeat and delay rate are adjustable from the keyboard.
- A built-in diagnostics screen will allow for verification of all memory types, including the Turbo-OS PROM. Also, there are provisions for testing the keyboard, joystick controls, paddle controls and other peripherals.
- There are also keys to select either a cold start of the system, or an option to return to the users application program if one is active.

The new CIO (Central Input/Output) system calls include the following:

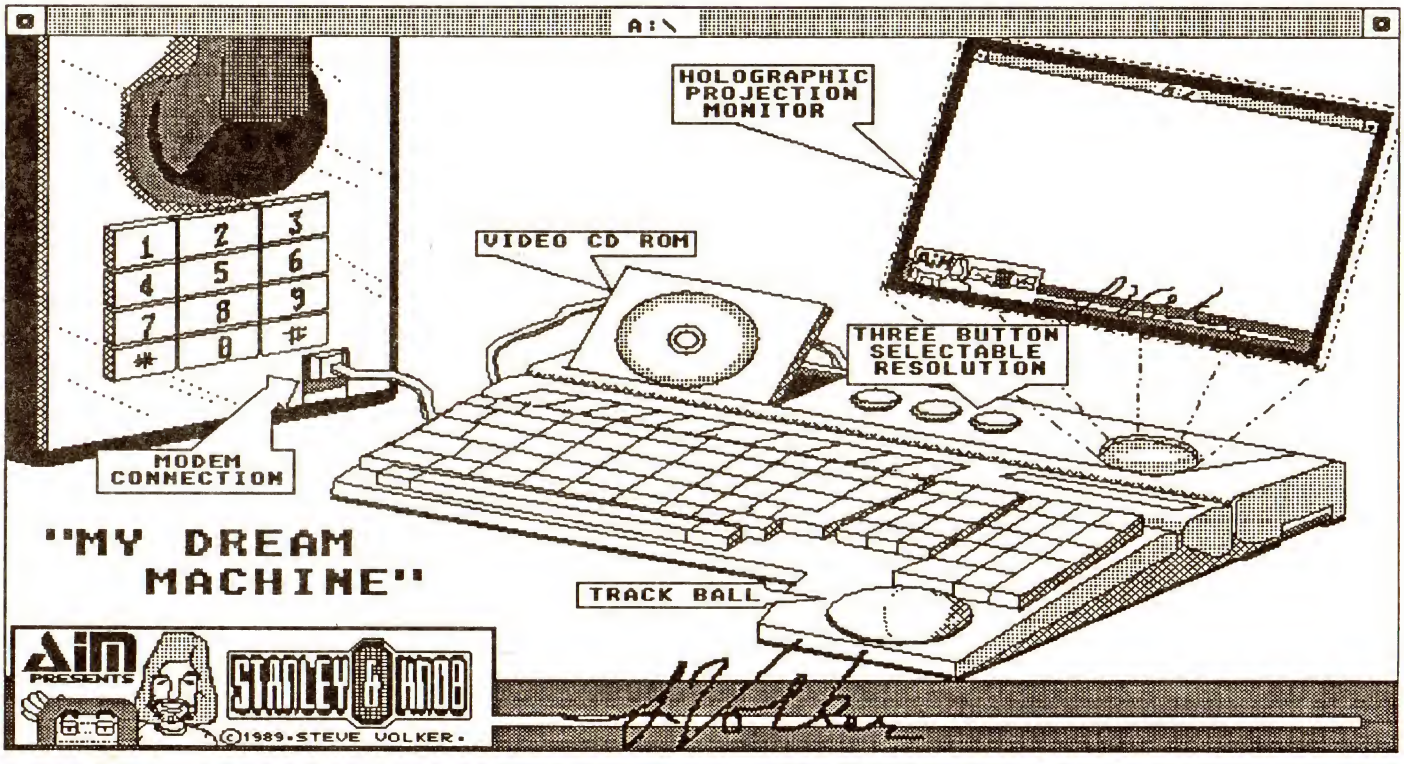
- CalcOS: Calculate and return the checksum of the OS ROM in register A.
- TRAMCk: Scan one (or all) of the three types of non-standard RAM.
- TAlloc: Allocate a specified amount of one of the four types of RAM.
- TDaloc: De-Allocate a specified amount of one of the four types of RAM.
- TExecu: Execute an installed Turbo-Application.
- TIniti: Initialize an intalled Turbo-Application.
- DoBank: Select one of the 16 possible Extended RAM banks.
- NatVec: Call an OS function from outside the 64k address range.

- CpyBuf: Copy up to a 64k block from-to anywhere in the 16MB range.
- FilPat: Fill a block anywhere in the 16MB addressing range with a pattern.

Another feature of the Turbo-OS is the improved floating point package. These routines are called by many application programs and languages such as the Atari BASIC and Atari Assembler/Editor cartridge. The amount of increase in speed ranges from 10% to over 300% and is being improved further. The improved routines were originally coded by Charles Marslett and were merged with the Turbo-OS under his direct authorization.

Some items, which should be noted about the Turbo-OS and compatibility with current applications, are:

- The C: (cassette) handler was removed to make room for the Turbo-OS enhancements and Turbo-menu. If the C: device is used, there is an installation option to allow the original Atari OS to be selected by a toggle switch. Anytime the cassette is needed, a flick of the switch will allow the system to communicate with the cassette.
- The extended character set table was also removed to free up more memory. This should not be a significant problem for domestic units, and like the cassette device, could be selected by switching in the Atari OS.
- Two routines to support the uploadable device linker from the 1090 interface were deleted. Their entry vectors terminate with an appropriate error. It was felt that there was no need to support this device in the Turbo-OS, and again, the switch option could be used if needed. Insufficient documentation would have precluded me from being able to write the routines from scratch anyway.
- A few games, and even fewer applications, scan the OS and compare it against the Atari OS. If any OS other than the Atari OS is resident, either an error message is printer or some other abnormal sequence follows. The switch option will allow these programs to run as normal.
- Some user written programs, and a few commercial programs, have used illegal entry points into the OS. The only valid entry points in the OS are on page $E4xx as listed in several reference documents. To simplify coding, or reduce code size, some people feel that using subroutines in the OS, other than the vectored ones, is a way to reach that goal. This is not as common as it was before the XL series was introduced.
- A very rare compatibility problem exists where a program either uses an unpublished 6502 op-code or feature. This has only shown up in two programs out of the several hundred programs tested by the beta testers. There is no easy fix for this, unless the program itself can be patched to remove the conflict. This would be evident if the program would not run with either OS activated.
- Finally there is a compatibility problem with certain pbi devices which do not buffer the address and data lines properly. The problems of this type are limited, but I am looking at modifications to the motherboard to correct the problem in all cases. The problem occurs only when the pbi device is attached to the Atari and is related to noise generated when that device is accessed.



The Right Brain

by Paul D. Stampfli (El Paso)

Author's Note: For the purposes of this paper the terms IBM and MS-DOS will be taken to mean any computer operating on the MS-DOS standard as its native operating system, as popularized by, and including, IBM. IBM, APPLE, Mac, MS-DOS, and other terms are registered and/or copyright by their parent companies, International Business Machines, Apple Computers, and Microsoft respectively. (Gee, I hope that's right, and am I ever glad that it's over!)

My second disclaimer is that this is actually a slightly revised issue of the article that I wrote for the August 1989 issue of the El Paso ST Club Newsletter. That is the last issue that Tim Holt, our club president, and I did together as Co-editors prior to hooking up with Atari Interface Magazine. Frankly, I just didn't have the time to do a totally new article before the deadline rolled around. Now to the more serious stuff...

Sorting It All Out

What the heck is going on over at IBM/MS-DOS and Apple? I'm confused. Have you ever noticed that no matter how much you don't want to look at a car wreck when you drive by it on the road, you somehow feel compelled to look anyway? That's how I am in this situation. I really don't want to look, but the magnitude of the disaster forces me to look.

I'm still getting those darned MS-DOS magazines that the subscriptions haven't quite run out on yet. (I subscribed to those back in the days when I wanted a "serious" computer.) And I sometimes make a mistake and look at them.

It's a mistake 'cause I feel so bad for the poor consumer who is reading this trash like it's just come down from the Mount of Olives. And boy is this chicken getting plucked in fine fashion! I don't get Mac magazines (fortunately I never wanted a Mac), but if I'm any judge at all of the human condition, those chickens are taking a major change in feather style as well. (They're getting plucked even worse than the MS-DOS guys.)

IBM Imitates MAC

Ok, let's try to make sense out of all of the "bru-ha-ha" and get organized. First, the MS-DOS world is trying to "re-invent" the Mac. Finally, after all this time, after all the ignoring of the Mac, not to mention the languishing of Microsoft Windows, IBM has jumped on the bandwagon.

Now, suddenly, they say that "their research" indicates that business people want a graphic interface to reduce training and retraining time and, therefore, money.

What they don't want to talk about is that with the wave of DTP (DeskTop Publishing) in the computer world today, the IBM standard is in some danger. It just doesn't have the tools to do the job quickly, cleanly, and conveniently.

DTP is best accomplished with a mouse. I know. I've used a keyboard command set and the mouse. The mouse wins without question. I haven't used a Track-ball, but I understand that they are difficult to use in intricate maneuvers because they amplify "user jitters," that slight motion that we all have in our hands all the time.

So IBM wants to re-invent the Mac. To get the mouse, the basic software, and a decent starter system, get that *big* checkbook ready.

You need to know that IBMs (and all its numerous clones) come in just a few basic designs.

- The PC - Not much used anymore, the original.
- The XT - the one we are most used to seeing in the ads, based on the Intel 8086/88, or NEC V20, series chip, generally a basic system, mono, no bells, no whistles, can be had in the $1000 range.
- The AT - based on the Intel 80286 and 80386 chips. These are the speed demons you hear about running at 20, 25 and even 33 mHz! Buy in for the basic, no bells, no whistles, mono, AT class machine is in the $2000 - $2500 range.
- And finally, the PS/2 machines. This is a new line of IBM (and a few clone makers) that covers from the XT through the AT style with some new bells, whistles, cases and wiring.

The newer idea is a bigger (wider) bus (pathway for data) which leads to more information flow and higher chip and throughput speed. The bottom line is that they go awfully fast. Probably faster than is necessary for a personal, at home, computer.

These are clearly business oriented machines, meant to handle very large databases and huge volumes of numbers in spreadsheets. They also have opening price tags in the $5000 and up, UP, UP,

range. And let us not forget that huge operator training "curve" lurking out there. Anyone tried to explain 1-2-3, or maybe WordPerfect or WordStar to a novice user lately?

Let's Hear it for PC Ditto!

PC Ditto, at this time, makes us PC compatible, the hardware version of Ditto II is going to make us XT compatible. And faster than most of the garden variety XT's out there. I think that Ditto II with JATO will make us a slow AT class machine, but able to run 286 specific software. I have JATO and when I run the "Norton" I see I have the world's SLOWEST 286 system! Now do you see why I'm confused?

Apple has already re-invented the Mac with the new SE-30 version. It's supposed to be an IBM killer, what with the mouse, one meg of RAM, 40 meg hard drive, and built in mono monitor. Why, it's new SUPERDRIVE can even read/write MS-DOS format disks!!! (Something my little Atari 520ST "Game Machine" has been doing just fine without modification for over three years now.) Aren't you impressed? If not, stand by, the price tag, basic, is $5000. Color will cost you additional $$$$$. Now that's impressive!

Intra-Compatibility

What about intra-compatibility? I think that's going to be the wave of the future. Business is tired of all this "custom applications, raise the price, raise the training cost, lower the profit margin" stuff. They want to buy whatever they like in software, take it to the office and use it. They do NOT want to have to make the devastating choice of either waiting and hoping it comes out for your machine, or scrapping all your hardware to match the software.

By the way, for all of you who believe in the MS-DOS standard, well, it just ain't so. It was once, but now it's like driving a "Chevy." "Is that truck, car, what model, what options, which engine, etc, etc? Oh, and by the way, you can't haul wood in your Berretta." Ok? Since the introduction of OS/2, the operating system for the PS/2 series of computers, there is no such thing as an IBM "standard" unless you ONLY deal with IBM and no one else. In which case I've got some land for sale...

MAC Imitates IBM

Mac talks a lot about a "DOS Bridge" that will make Mac *The Name* in computers. Remember that SE-30 we talked about before? The salesman at a local authorized dealer (This is El Paso, remember?) was VERY careful to tell me that the bridge did NOT make it fully compatible with MS-DOS — just "some selected applications like WordPerfect and Excel." By the way, the bridge goes for "$1500-1600 depending..." I didn't have the guts to ask what it depended on. We were already up to $8000 plus for my color Mac SE-30 and I didn't have a printer and *no software* for either IBM or MAC.

If you say "intra-compatibility" to IBM/MS-DOS salespeople they mostly laugh. One even had the guts to tell me, (I was playing dumb) that there was NO software written for which an IBM version didn't exist that was better and (hold on) *usually cheaper.* I was nice, you would have been proud. I didn't even bite him. (Well, not too hard anyway. Maybe all this civilization stuff is taking the edge off my instincts.) To make a long story shorter, to get the mouse ($150) and "WINDOWS", a Microsoft product that is supposed to be as good as GEM, (check the resolution, I don't think so!) ($99) will require an AT class machine. That works out to slightly less than $3000 without a printer at a local dealer out at "Computer Plaza" on the freeway. The salesman was polite, courteous, and very helpful. I felt kinda guilty about being less than truthful with him. He did make the point that these are RETAIL prices and could be negotiated if I bought a package deal. I might even be able to get some software thrown in on the package...

To the Point

"So Stampfli, you've done a lot of talking and 'BSing', what's your point?" My point is that Nick Sullivan wrote an outstanding article in the July issue of Home Office Computing that started all this. Here are a few paraphrased quotes that got my blood pressure working.

"A Mac gives me a greater sense of power and control that an MS-DOS machine does. I love the ability to size and move windows around the screen, to cut and paste between any two programs, and to quickly move to the middle or end of a file by just moving the arrow on the edge of the window. The ability to store a grab bag of pop-up programs (called desk accessories on the Mac) is also a big advantage. The Mac is more fun to use... It's now clear that the original design concept of the Mac was rock solid... "

My point is that I sat down, spent the time on the phone, and came up with the price comparison between the three systems (see table 1) here in El Paso, not in New York, not in some second rate magazine from some fourth rate company that may never deliver. All these companies are local, established, and have a reputation in the city. They aren't chain stores that can afford to loose money. I only identified Jenkins' Computer Store because he was the only one who gave me permission to reprint the facts and figures.

My point is that for roughly the same, or much much less, money, *never more,* I can run all the software I have ever found made for the Big Three of personal computing. Pay attention class, this is the wave of the future here! Neither of the other two even come close to making the compatibility jump, and the solutions of IBM, (to re-invent the intent of the Mac interface), and the Apple solution, (make it kinda sorta compatible and charge as much as a good, separate, XT machine for it) are totally unacceptable to me.

My point is that the Software is *there* for the Atari, WordPerfect, DTP in lots and lots of flavors, dBMan (a dBase III Plus like program that runs on the Atari and shares files with the MS-DOS version), and then a new program LDW (Logical Design

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Works) Power, a Lotus 1-2-3 program that the authors refuse to call a clone, it does however share files and Macros with Lotus 1-2-3 version 2. LDW Power goes for a retail price of $149.95, check the price of Lotus the next time you're out there. And if you just Have to have that 1-2-3 come up on screen, get PC Ditto II and run Lotus, WordPerfect, dBase III Plus, or any other MS-DOS program faster than most XT clones. Now where else can you find an XT clone for $300? Just try it, I dare you.

Hurray for the ST!

What the heck is going on over there, anyway? I'm just as happy as a pig in stink with my TOS/MS-DOS/Mac(able) little GAME MACHINE. (Or as Jim and Tom call it, the "STIB-MAC") I like that name, perhaps it will catch on.

While on a recent vacation in the Pacific Northwest, I wandered into an MS-DOS clone store. Nice folks, polite and patient. When I told them what my machine was doing and what I could do with it, they got VERY interested in who owned the patents and when they could get some to sell in the greater Seattle area. When I told them it was an Atari at first they didn't believe me. So I talked them into calling a local Atari dealership and asking all the right questions. When I asked if they would start dealing Atari, they laughed and said "Only if we can put it in a PS2 tower case and put someone else's name on it." I'd like to change that image, but it still haunts us.

And finally, if Mr. Sullivan thinks that the Mac design was rock solid, what would he think of the design of the Atari ST and Mega series of computers? Besides, how much more bang for the buck can you get? Think we should tell those other guys that the ship has already sailed? Nah...

Mac SE-30
Basic — Mono **$5000** Mouse, 1 meg RAM, 40 Meg Hard drive
Extra — Color (Monitor & card) $15 - 1600 MS-DOS bridge $1700, 5&1/4 inch PC Drive $ 329 **$8529 PLUS**

MS-DOS CLONE —AT Class (Intel 80286)
Basic — 20 Meg Hard drive **$2500** 640 Kbytes RAM, Color monitor
Extra — Mouse $ 150, MS Windows (software) $99 **$2749**

Atari 1040 ST (At Jenkins' Computer Store)
Basic — 1040 ST (1 Meg) RAM **$1000** Mouse, Color System
Extras — 5 &1/4 PC Drive $ 200, 30 meg ICD FAST HD $650, PC Ditto II $ 300, Spectre GCR $ 300, Mac ROM's $100 - 200 **$2550 - 2650**

NOTE: These prices are retail and making a good "deal" is possible. Also note that the MS-DOS clone will only run MS-DOS software, The Mac will run Mac and "some" MS-DOS software. The Atari will run TOS, Mac, and MS-DOS software. The difference is not just the dollars, it's the utility.

Madame Librarian

A Magazine Article DataBase

by Gordon Totty (MACE)

Madame Librarian was written by David Plotkin, one of the more prolific writers on the Atari scene. It was published by Astra Systems Software, a branch of Southern California Astra Systems, Inc. The copy I reviewed is identified on the disk as "v 1.0, 9/13/88" and in the documentation as "Rev 7." It was written in OSS's Personal Pascal.

You might have trouble finding Madame Librarian with the demise of Astra, but if after reading this you think it is for you, I suggest you write to David Plotkin at the following address:

Dave (Madame Librarian) Plotkin
488 Walnut Avenue
Walnut Creek, CA 94598

Madame Librarian is a special purpose database which you can use for cataloging magazine articles. It comes with its fields set up for that purpose alone. While you could, I suppose, put any kind of information into these fields that you want, you would be limited by the sizes of the fields and use the titles given them.

The fields are: Title, Page, Description, Magazine, Issue, Author, Type, and Language.

You can search for records that match words or phrases in any of these fields except issue date. I looked at about 200 of the entries and the earliest date that I noted was December, 1985. The latest was September, 1988, so this database contains almost three years worth of records of ST articles. The records represent articles about the ST that were published in Antic, Analog, ST-Log, ST Resource, STart, Compute's Atari ST and Compute.

In case you are wondering, I already checked and learned that I didn't write any of the articles in this database. I am prolific in other pursuits and arenas. At least, I think I am! You can add any articles from any magazine that you wish to the database.

You can print out listings from the database. One word of caution, however. The program does not send line feeds to the printer, and so you may have to configure your printer to compensate, unless you like to sit and watch your print head blacken one line for a few minutes.

There sure are a lot of Atari magazines, aren't there? Sometimes I feel like we have more magazine support than software support. Plotkin's database can help you bring order to some of this pleasant chaos. In my home, all of the piles of magazines in my study can be moved to the basement after the articles I am interested in are added to the database. Then, one small diskette and maybe a printout can remain in the study with the rest of the material "archived" in "remote storage."

Without a database like this, I would be (have been!) reluctant to move the magazines to the basement. I felt that if I did, I would never use them again. The database is the key. I can use it for quick reference and, if I find something that looks interesting, then go to the basement to dig it out. I would know as I started down to the catacombs exactly which issue I wanted. Gosh, if I arrange them in order this could get to be downright efficient!

The documentation is complete and clear, owing no doubt to Mr. Plotkin's skill as a writer. I have always had a suspicion that some software houses would publish much better documentation if they would only let a professional writer prepare it. While this instance proves nothing, it is valuable data that reinforces my hunch. Heck, I can show you documentation that could have been improved if the software house had only let a reader look at it before printing!

I'm getting off the subject here, but one final thought: Wouldn't it be fun to be on a panel of documentation pre-publication reviewers? "OK, Smedley, you read it. Now, what do you do first?" "Uh, ... gosh, I don't know." Mr. Plotkin does not leave you with that feeling of not knowing what to do next.

Madame Librarian came with a coupon that could be used to order upgrades, which are available monthly. Perhaps once or twice a year would be enough for you, but with monthly updates you'll know when you order an upgrade that it should be up to within two months, at most, of being current. This used to cost just $5.00, plus $1.25 shipping and handling, and was available directly from Dave Plotkin.

Unfortunately, though there is provision for you to save your own input as part of the database that you first acquire, I saw no information on how to merge this revised file with a new update from Plotkin. A couple of smaller databases, perhaps split by magazines (his and yours), might be more efficient than one big one.

Do you really need to buy this database? I imagine most of you have a word processor, spreadsheet, database program or all three. Although most spreadsheets, and some word processors, lack a search function, you could still do a fairly nice job of simply organizing data with these programs. A database program would give you more functions and flexibility than Madame Librarian.

However, if, like me, you do not have such a database already established, for a small expenditure you can now have most of the work done for you. I don't know about you, but I am lazy. My time is worth more than a few bucks. Well, at least sometimes it is!

Review of the Tempus II Text Editor from MichTron

by Craig Harvey (WAUG)

I purchased Tempus II from Michtron at the World of Atari show in Detroit, and my first reaction was WOW! That's FAST!

And I saw all the features it had like character redefinition, macros, sorting, choice of cursor motion from line to line, comparing files, etc., and I said another WOW.

However, I quickly realized that there are a couple basic features that any editor should have, and the lack of them sticks out like a sore thumb when you actually try to use Tempus II.

For instance, I started writing this in Source mode (no wrapping) since I had tried Wrap mode enough to know that it did some really weird things. Source mode meant that I had to hit Return at the end of each line.

Of course, I eventually found something I wanted to go back and change, but when I did I was hit with the alert "Warning: Line 7 too long!! The desired command cannot be executed because the maximum line length would be exceeded." (As an aside, trying to type those quotes was interesting, since you have to hit shift-2 to get a double quote. Hitting the quote key gives you the @ sign. Luckily the user can be fix this in the keyboard definition table.) The alert did not provide any choices for how I could remedy the situation.

However, having become familiar with the editor, I knew I could either reset the line length to something greater than 80 characters (not a good idea for anything you plan to print out eventually) or to switch to "Word wrap mode." I went ahead and switched to word wrap mode, and some fascinating things occurred.

It went ahead and performed word wrapping of ALL the text instantly (remember what it does, it does FAST). This sounds good, but on all those lines where I had put Returns at the end of the line, the last word of that line became one with the first word of the next line, and thus was all put at the beginning of that next line.

So.... I went back and inserted spaces between the two words. And now I'm typing away in word wrap mode thinking that all is fine UNTIL I decide to start a new paragraph. The first time I hit Return now, it will simply display a little 'cr' in the cursor without moving anything anywhere.

Then I hit Return again, and finally it moves the cursor to the start of a new line, while sticking that cute little 'cr' at the end of the line I was on. Note that it didn't bother putting any such 'cr' symbols after all the other lines.

So, what does this little 'cr' mean? It means that instead of ending a line with the standard CR/LF (or whatever other characters you care to specify in the setup parameters) it adds an extra CR (ascii 13), resulting in a CR/CR/LF combination in the saved file — just what one needs when you thought you were dealing with a straight simple text editor. I still haven't figured out what I'm going to do when I want to print this thing out. (Later note: it does print out fine from either Tempus or the desktop.)

Now that I've made both source mode and word wrap mode sound perfectly wonderful, let me add my biggest peeve about source mode. Even if you have specified some nice long line length (it will go up to 255) and you have two nice short lines that you wish to merge onto one line, you CANNOT do it by simply hitting delete at the end of the first line or backspace at the start of the second. Either of these approaches does absolutely nothing.

The only ways I've found to do it are (a) select one of the lines (which requires double clicking with the left mouse button at the start of the line, and then double clicking with the right button at the end of the line), move the cursor to the desired insertion point and execute the Block Move command (from the menu or with a CTL-V), or (b) create a macro that will do the actions of (a).

And if you think it ought to be possible to delete the second line and then undo the action with the cursor at the end of the first line, you're right — it OUGHT to, but it isn't. The undo command ('undoable undo') will only undo the last deletion and it will only undo it by placing the deleted characters exactly where they were originally. (Give me my Flash editor!)

Working my way down my list of gripes, we now hit the subject of search and replace. Yes, what it does, it does FAST, and it even has some really great search/replace features like allowing the search string wildcards of '?' and '*' for one or any number of characters, respectively. (And I thought I had written the only ST search/replace routine that allowed wildcards <smile>)

Another feature I haven't seen before on the ST is the ability to specify a column range for the search/replace function. For instance, you can tell it to

replace '111' with '123' only when the '111' occurs within columns 10 - 20 of any line. However, it will not let you search for whatever characters it is using as end-of-line markers (normally CR/LF), and it will therefore not let you find any string that starts on one line and continues to the next line.

And now for a couple final minor grievances. Access to the macro recorder can only be obtained from the keyboard and not from any menu function. (In trying this out right now, I just lost ?ccess to the first letter of the ?lph?bet by defining ?ssigning ? m?cro to it, so be c?reful.)

OK, I'm back now, with full alphabet in hand, after saving, quitting Tempus, and returning. The last thing I noticed was that in the keyboard definition file someone apparently truncated the lines at 60 columns when there had been text going beyond that point describing various key functions. There is enough text remaining that you will probably be able to figure out what the missing pieces should be, however.

Let me close with some additions to the list of good fun things Tempus II has to offer, which I began way back in the first paragraph.

- Edit 4 files at once (with block move/copy among them)
- Optional full justification in word wrap mode
- Configurable file auto-save, screen-saver, and corner clock.
- Upper/Lower case conversion.

And especially for you programmers:

- Cross reference generation (which also allows using compiler error output to go to the line and column of an error in the source code)
- Checking for balanced structures (e.g. pairing of comment symbols in source code).
- Built-in RPN calculator with decimal/hex/octal/binary conversions.
- Run another program (e.g. compiler) from Tempus with parameter passing (the parameter passing was not compatible with my TDI Modula-2 system but hopefully is OK with other compiler systems). Also, go the other direction and run Tempus from another program with parameter passing.
- Shift blocks right or left (great for adding/deleting execution loops in programs).
- Optional print out of line numbers in the text.

In closing, there are other things Tempus can do, but the above are the ones I considered most fascinating.

Tempus II is small and fast for all that it does (the prg file is about 70K and it's all done in assembler). It will run in either high or medium resolution. Tempus II costs $79.97.

Final note: everywhere above that says "fast" should read **INSTANT**.

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Hard Drive Myths & Mysteries Part Two

by David C. Troy

(c) 1988 Toad Computers
This article explains many myths & unravels the mystery of hard drives a bit. It may be distributed freely, and is considered to be public domain, provided it remains unmodified, and credit is given to the original author.

So, you want to get a hard drive? Well, I am going to quickly go over a few solid facts about hard drives so that you may become better acquainted with the technology and thus pose more probing questions, allowing you to learn more on your own. I do not intend to go over every little detail, as I don't believe it's necessary.

The Basics

The first thing we need to recognize is that the DMA plug coming out of the back of our ST is NOT standard. Its heart is in the right place, but in order to hook up a hard drive to our DMA port, we need some more circuitry. That more circuitry is called a Host Adapter. It converts the ST's non-standard DMA port into something that is standard called SCSI, or to draw it out, Small Computer Systems Interface.

Now that we have a SCSI (pronounced Scuzzy) connection, we can attach standard SCSI devices. Standard SCSI devices include: Hard disk drive controllers, hard disk drives with imbedded controllers, tape backup controllers, and other amazing things. What Atari and Supra drives use are MFM hard drive controllers. ICD FA*ST drives use drives with imbedded controllers. You can't use a hard drive without a controller. It may be an imbedded controller, but you need a controller. You can't use an IBM hard drive controller. They aren't SCSI — they use the IBM bus, another non-standard interface.

So at this point, just for laughs, let's say that we have an ICD ST Host Adapter with an Adaptec 4000 MFM Hard Drive controller hooked up to it.

Now that we have a hard drive controller, we can hook a hard drive up to it. (See, this does make sense.) Virtually all hard drive controllers connect to ST506/412 flavor hard drives (Don't taste them; they have a 20 pin card edge connection and one 34 pin card edge connection, that's how you can tell.), most HDs are ST506/412 though, so don't worry too much. You CAN hook up IBM hard drives (not hard cards) to your ST by way of your SCSI controller, but be sure to chuck the IBM controller — remember, it won't work.

So at this point, you have an ICD ST Host Adapter, an Adaptec 4000 MFM hard drive controller and a Seagate ST225 20 Mb hard drive connected to your ST.

Add a Little Juice

What's missing from this picture? Power, and cabling too. Electricity makes it work better. You will need a power supply with 2 disk drive connections (+5 & +12 Volts). Let's say, just for laughs, that you're using the power supply & case from Toad Computers. You'll have a fan & all the power you need to get this thing going.

As far as cabling goes, you need to connect your ST to your host adapter. The DB19 cable comes with the host adapter. You need to connect your host adapter to your controller. For this, you need a 50 pin array female to female cable, which comes with a ST Host/Controller Kit, but may need to be purchased/manufactured separately based on your needs. You need to connect your controller to your hard drive. For this you need a 34 pin cable, as well as a 20 pin cable. These can be purchased with an ST Host/Controller Kit or with a whole drive system kit.

Things You Should Know

Most SCSI controllers can handle 2 drive mechanisms each, but some take as many as 4. You can run up to 7 controllers on one host adapter board (which means probably 14 hard drives). Drives with imbedded controllers cannot handle a second slave drive. To expand such a system, a second controller, or second drive with imbedded controller, must be purchased.

MFM and RLL are terms which refer to capacities of hard drives. Think of MFM as single density & RLL as double. Some mechanisms are certified for RLL and others are not. It is possible, and is becoming increasingly discouraged, to format MFM drives in RLL, although with older drives it can be done usually successfully. RLL controllers cost more, as do RLL drives, but they don't cost much more, and they provide about 150% increase in storage over their MFM counterparts. But different people have different needs.

Ask a dealer like Toad Computers for advice if you have any questions. We'll be back next time with some more exciting hard disk facts!

Neo STAG Struck by Virus Origin Unknow -- Members Seek Help

by W.D. Parks & Chet Walters

Copyright 1989 This article first appeared in the August NEO STAG News and may be reprinted so long as it is not modified in any way and this preface is included in the reproduction.

There's a trojan afoot in the Atari community! Beware! Write protect all your diskettes NOW! This trojan 'virus' spreads without any ill effects, unbeknownst to you or anyone who comes in contact with you, until it's too late! You can spread it as innocently as giving your friend a disk full of pics to look at. We have found this beastie on commercial disks, magazine disks, club disks and many more. No disk is safe. Check all your disks!

What first alerted the Wiz to the fact that "all was not right with the world" was when I wrote an executable boot sector to the floppy in drive A: with DC Formatter. The boot sector was to bypass the harddrive auto boot and execute the auto folder on the floppy instead of the one on the harddrive. I copied a few files to the disk and rebooted the machine. Alas! The executable boot did not work as advertised. So, I wrote the boot sector again. Again it did not work. Hmmmmm.... it always worked before. Let's get DiskDoctor to take a look.

Ok, the $60 BRAnch looks alright. The $38 offset looks ok. Let's see what's there. Yikes! This ain't no bypass! And why does the 'Dclick' that DC formatter always writes to the disk now say "00 00 00 00 c k"???? Hmmmm..... So, just for a lark, I ran a virus detector program and checked the disk. LO! A virus! Type 1. Known! Yikes again! There was something there overwriting the boot sector and spoiling the harddrive bypass routine. What?

In closer examination, we found a routine that is explained in greater detail later in this article. However, we must first emphasize that the programs mentioned above had absolutely NOTHING to do with the virus. They were as innocent as we. They were victims. This trojan is all too easily passed around.

All one needs do is boot with a disk infected with this virus and any disk placed in the drive thereafter will become infected whether it is read or written to and disks that need their own boot sector to work properly will be destroyed. If the drive motor spins for any reason — ESC pressed to update the window, a file copied to or from it, a program calls up the fileselector, just open the window — it gets infected. This trojan can spread rather quickly throughout your system, your club, your community in this way.

The virus itself seems only floppy oriented, infecting only floppy disks, but the KEY DISK might just do more harm to a harddrive than anything else.

I discovered the culprit late Wednesday night (7-26-89) but was very occupied Thursday getting ready for a short vacation so I had little time for an extensive investigation. I did, however, sound the alarm to the other members of the club.

In the limited time I did have, I found that nearly 50 of my disks were infected. Others of our club found more than that in their library, others not so many, but one fact is clear — it seems that *everyone* in NEO STAG is infected.

I spoke to a friend in Cleveland and mentioned it. He called me back an hour later and said he'd found numerous disks in his library infected as well.

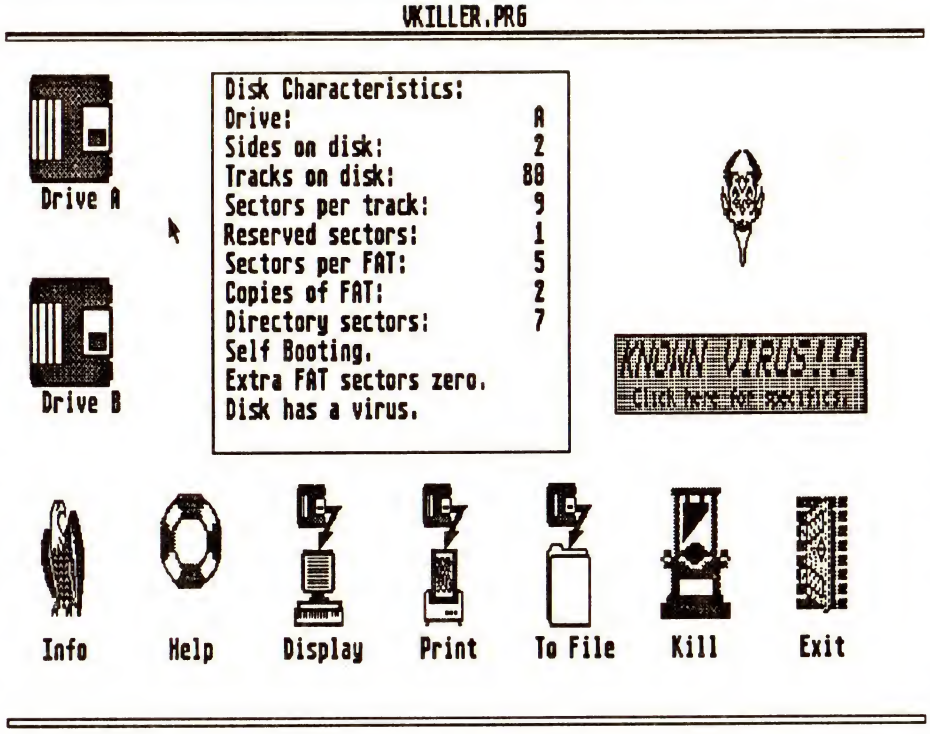
A friend of his had two disks from the WOA show in Michigan that were infected and the man insisted that he had not written nor read the disks without the write protect tab in place which means that the disks came from the show in their present ill condition. This little beastie may well be very wide spread and a real threat to the entire Atari community.

Whether this trojan is an old one that has resurfaced, or a new one that's newly circulated we can't tell. In perusing the reports from various members of our group, we seem to think that we first got infected here in early spring 1989. Judging from the disks infected and scouring our memory, it seems disks not placed in the drive since March or April are 'clean,' but many of those used after that time are dirty.

This is a standard trojan that spreads silently and waits for a key disk to set it off. We haven't found the key disk. We want you to help. Here's all the information we care to release about this little beastie (if we give out any more there may be some unscrupulous individuals at large who could create and spread their own variety of key disk for this trojan).

The lion's share of the digging was done by Dr. Bob. Because of his unique investigative skills and the fact that I was leaving for a four day hiatus at Virginia Beach, I turned the 'dirty work' over to him.

This Trojan program seems to have come into it's 'hazardous' phase. Dr. Bob calls this a trojan because that is what it is. It is not a virus. In Dr. Bob's inimitable



style of phrase: "A virus is a glorified term given to personify and to create a mystique for a simple off-color, fornicating device; to wit: a program that will damage your diskettes.

These kinds of programs do not deserve ANY public relations other than jail sentences. So let's snip the 'hero cult' where it can't have any offspring (preferably with something rusty!)"

Dr. Bob's findings: The Trojan program that we have here is sometimes called TYPE 1.

Identifiable Characteristics

At the very beginning of the boot sector the first 6 bytes are hex codes: $60,$38,$00,$00,$00,$00

The $60 ..... BRAnch instruction of self booting disk (normal); the $38 ..... tells offset to which to BRAnch (normal); the 4 zeroes.... There should usually be something! (abnormal)

NOTE: Many self booting disks or disks with executable boot routines built into them have the $60 $nn sequence as the first word of the boot sector. The $60 is a flag which tells TOS to execute the routine at the $nn offset in the buffer.

Disks with these codes are not always trojanized, they are simply boot-disks. Indeed, these are the very codes that alerted the WIz to the trojan since the second byte had been modified so the 'bypass HD' boot routine wasn't executing. The two trailing zero words (4 zero bytes) are the quick identifier of the trojan in this case.

Immediate Symptons

Few to speak of, other than all floppies get this auto boot sector written to them if the trojan is hooked into the system. It's a sneaky one, writing itself to all disks accessed in either floppy drive while you are unaware except that you might notice a slowdown in floppy access time.

The purpose of a Trojan is to duplicate itself on all diskettes and to wait for a key disk.

Day in the Life

This trojan is started by placing a diskette that contains the viral boot sector on it into drive A: and booting the machine which causes the trojan to wedge itself into the operating system's HDV_BPB vector... pointing that vector to itself.

Hence forth, any calls to read a new floppy will pass through this new vector. Hard-drive owners are not immune since the ST always reads the boot sector in floppy drive A: first and executes a 'flagged' boot sector that starts with the BRAnch instruction.

After it's 'hooked in', the trojan first calls the old vector then, before returning to say...the desktop or PageStream or whatever program accessed the disk, it will sneak a peek at the boot sector. If it doesn't find a $60 $38 as the first two bytes it then knows there's a 'clean' disk in the drive and proceeds to copy itself to that diskette's boot sector. This is done before the diskette has stopped spinning from the initial valid call so no one's any the wiser.

It then simply 'falls through' to the calling program which first accessed the diskette and all proceeds as normal. But the work is done! If the diskette accessed wasn't write-protected it will now have the trojan on it!

That's what it does if it finds no $60 $38 as the first word. However, if it FINDS the $60 $38 already there THEN we got some action going. It will check the diskette's 'identity' at offset 2 and later at 4 looking for the code $10 $xx (again, we won't tell you exactly what this 'ID number' is so there won't be anyone else making KEY DISKS for this trojan other than the original SOB that started it) immediately following the $60 $38. If it finds the $10 $xx it knows that: THIS IS THE KEY DISK!

It then goes through a little song and dance that can only be explained as "The Trojan's Author's need to check to make sure his routine worked." It checks the next two bytes also and compares them with itself. If the keydisk's number is larger than itself it acts!

Now...remember the identifying marks? 60 38 00 00 00 00? EVERYTHING is going to be bigger than 0000! Right? So why bother checking? I told you why! The programmer wanted to test it and not write over his own key-disk by accident....

What does it do now? That is a very good question. It does whatever the key-disk tells it to do since the key disk has an entirely different routine residing at the offset BRAnched to and THAT is where this little trojan jumps to when it finds the key-disk. It RUNS the key disk program (which appears to anyone viewing the diskette as though it were just another auto boot program; but now we know better!).

It could do something as innocuous as print a "hello world" message on the screen and return your system to you. It could also do something as harmful as zeroing all the directories on your harddrive!

So that's the key-disk to look for. It will have $10 $xx at the 3rd & 4th bytes in the boot sector (offset 2,3) right where the first two zeroes are on the trojan. It would look like:

$60 $38 $10 $xx $nn $nn

If the "$nn $nn" also contain zeroes then the key disk will be dormant.... maybe.....

TROJAN DISK AS HEX | Sector #0 of 000

```
     0  1  2  3  4  5  6  7  8  9  A
  0 60 38 00 00 00 00 00 75 73 00 00 E
 30 00 00 00 00 00 00 00 00 00 00 00 E
 60 FF C4 22 79 00 00 00 84 C6 D3 FC E
 90 43 FA FF A4 91 C9 D5 C8 4E D2 4
120 4E 75 4E 56 00 00 00 3F 2E 00 00 7
```

TROJAN DISK AS TEXT | Sector #0 of 000

```
     0  1  2  3  4  5  6  7  8  9  A
  0 `  8  .  .  .  .  .  u  s  .  .  E
 30 .  .  .  .  .  .  .  .  .  .  .  E
 60 FF C4 "  y  .  .  .  . C6 D3 FC E
 90 C  FA FF A4 91 C9 D5 C8 N  D2 F
120 N  u  N  V  .  .  .  ?  .  .  .  8
```

KEY DISK AS HEX | Sector #0 of 720

```
     0  1  2  3  4  5  6  7  8  9  A
  0 60 38 10 CENSORED  7
 30 00 00 00 00 00 00 00 00 00 00 00 E
 60 FF C4 22 79 00 00 00 84 C6 D3 FC E
 90 43 FA FF A4 91 C9 D5 C8 4E D2 4
120 4E 75 4E 56 00 00 00 3F 2E 00 00 7
```

KEY DISK AS TEXT | Sector #0 of 720

```
     0  1  2  3  4  5  6  7  8  9  A
  0 `  8  10 CENSORED  '
 30 .  .  .  .  .  .  .  .  .  .  .  E
 60 FF C4 "  y  .  .  .  . C6 D3 FC E
 90 C  FA FF A4 91 C9 D5 C8 N  D2 F
120 N  u  N  V  .  .  .  ?  .  .  .  8
```

If you encounter the key disk, DO NOT erase it! Send us a copy so's we can dig in there and find out first: what this sucker is supposed to do when it executes and second: identify the SOB that started this thing circulating! Send to:

NEO STAG
PO Box 45
Girard, OH 44420.
You will be rewarded.

So, what do you do to prevent this virus spreading if you have it? You can, of course, get hold of a virus detector/killer program and examine all of your disks. We can't recommend a particular program for you because our bylaws forbid it.

You see, the members of NEO STAG will not purchase, donate for, publish the name of, nor support in any way any single virus detector/killer program on the premise that the author of such a program is not above first releasing the virus eradicator then subsequently releasing the actual virus the program is designed to detect and kill thereby creating a demand for the original virus detector/killer program.

That's that, though we can say that there are some out there that will detect and kill this trojan effectively. We can recommend you use a simple sector editor and look for the patterns described in this article. If you find the pattern, you can kill the trojan by writing a single zero byte to the very first byte of the boot sector.

However! Don't overwrite ALL disks that have the $60 as the first byte. If it's a known boot disk (game, executable boot, etc.) then DON'T overwrite that $60 or the disk will be destroyed. Look for the trailing zero bytes like you see in the illustration, then you can feel comfortable killing the virus with the zero byte.

The best way to prevent yourself from getting a virus is to always keep the write protect tab in the open position and always boot with a disk you know is clean. Again, if you find a disk with the 'KEY' sequence, make a copy and send it to us. We want to see it!

[Editor's Note: This particular "sleeper virus" or trojan horse seems to be near epidemic proportion in the ST community, with reports of the virus from many clubs in the U.S. and Canada. According to Jerry Cross, president of the Genessee Atari Group, their club library was found to be infected, and they contacted other clubs who have found this virus in their club libraries.

In checking our own personal library, we discovered a handful of disks that were infected with this particular virus! It is VERY important that you check ALL your disks to insure that they are virus free, and to check every disk you receive from outside sources. If you receive an infected disk, inform the person/organization you receive that disk from IMMEDIATELY.

If you have friends who own an ST and have not read this article, please inform them of this virus. We all need to share this information and work together to kill this virus before a "key disk" comes along that does real damage.]

Space Station Oblivion From Epyx

by Bob Retelle (MACE,WAUG)

This is one of those games with a really silly premise that turns out to be a very playable game in spite of the silliness. The scenario for the game tells you that the moon of your planet is threatening to blow up, due to gas pressure from below the surface. Your job is to explore the 18 different sectors and set up drilling rigs that will vent the gas and save the day.

Somehow, I don't think the idea of designing a game based around a planetoid that has gas would have ever occurred to me, but here it is.

You begin the game in a ground-based crawler equipped with a laser cannon and a transporter to teleport the drilling rigs from your home planet. Somewhere on the moon, in one of the sectors, is an air vehicle that will let you fly around and view everything from overhead, but it can't place any drilling rigs.

Each sector is named after a different mineral, such as Amethyst, Graphite, Obsidian, and so on. There is an optimum place in each sector for your drilling rig, but unfortunately, except for a very few sectors near the beginning, it's a guessing game as to where to place the drill. You CAN pick up the drilling rig and try again, but that action expends a large amount of valuable energy. Your score depends a great deal on how closely you guess at where to drill.

The graphics in the game are very nicely done. The cockpit of the vehicles is well detailed and colorful, and the landscape of the moon is done as filled polygon shapes. You can view the objects you encounter from all different angles and see their shapes change as your point of view changes.

Unfortunately, the sound doesn't measure up to the quality of the graphics. Most events are accompanied by one or another of the limited repertoire of beeps and bongs provided by the game.

Something I'm always picky about is the kind of controls a game provides. Happily, the vehicles in Space Station Oblivion have a versatile and easy-to-use control system. The mouse can be used for all movement and positioning of the vehicles or the keyboard cursor keys can be used for the main directional controls.

You have full control over rotating the craft around all three axes and raising or lowering its height. The distance travelled each time you click on "forward" can be set and changed, as can the angle turned when you rotate. You'll find situations when you need the utmost speed to get through dangers and other times when you'll need to creep along slowly and precisely.

The crawler and aircraft are armed with a laser that does double duty, both as a defensive weapon and to activate the various switches and controls in the sectors. Doors and other obstacles can be opened by shooting their controlling switch. Some sectors have devious puzzles which can make getting to the proper drilling site pretty tricky.

Switches in one sector can also control things in other sectors, resulting in a lot of trial and error searching through the sectors. The sectors are always the same every time you play, so the game is mappable.

On the other hand, this also results in having to play through all the sectors you've already solved to get to the ones that are giving you trouble. Happily, there's a Save Game option so you can save the game at your current position.

The laser sight is fast and responsive, and you'll need fast reflexes to take out the enemy laser cannon and orbiting platforms that appear suddenly. You can blast most of the things you see without any problems, and a lot of objects are worth points even though there's no particular reason why.

For example, if you watch the self-running demo in the game, it blasts a rectangle on top of a tall pole in the first sector. This target is worth something like 1000 points, even though it doesn't look any different from any of the other essentially similar rectangles in the game.

Your energy and shields can be replenished by finding and shooting two different kinds of crystals. The supply of crystals is limited, so you have to be careful not to waste energy or take too many hits from enemy lasers. You also have to be careful not to fall off the edges of the sectors or any of the high platforms and ledges you'll have to cross.

Space Station Oblivion isn't the kind of game you'll boot up and play over and over again, for months or years, once you solve the puzzles. It IS fun though, and complex enough to hold your attention until you do solve it.

Incidentally, while browsing at a computer store recently, I came across the same game in the "Imports" software section, with the title "Driller."

The Way the Other Side Sees Us

by Tim Holt (ST of El Paso)

First of all, let me give you some exact quotes from the July/August issue of INFO magazine, a magazine for the Amiga and Commodore computers. Please remember, these are all from *ONE* edition:

Page 13, under the column "Rumor Mill": *"On the topic of piracy, one big US Amiga software distributor estimates piracy in the Amiga market at 50% — he speaks of the 'Atari-ization' of the Amiga market...."*

Page 14, under the column "Show Report" a report on the Chicago COMDEX a picture of the STacy laptop and the following: *"Elsewhere, Atari took first place in the Vapor Hardware catagory, with the 'introduction' of the STacy, a laptop version of the Atari ST. The model they showed was under glass and looked like it had been put together with a hot glue gun just for the show. The LCD screen had horrible contrast but it makes little difference, since I would bet my Commodore Max Machine that no one will ever see one on a store shelf anyway. Not satisfied with a single new vapor product, Atari also announced a tiny hand-held PC clone called the Portfolio."*

Page 71, under the column "Summer Slump" the author gives a reason NOT to subscribe to Antic's Amiga Plus: *"Antic's Amiga Plus: Do you really want to get your Amiga information from an Atari publishing company hedging their bets at this late date as the Atari slides?"*

I don't know about you, but these three quotes made my blood boil! Atari slides? Vapor Hardware? Atari-ization of the Amiga market? It seems that the editorial policy of INFO magazine is to bash the Atari line of computers.

As a long time user of the ST line of Atari computers, I have been reading Atari-related magazines for a *long* time, and I have *never* seen an attack on the Amiga like I saw on the Atari in this issue.

The Amiga is a nice machine. One of my best friends has one. The Atari is a nice machine. I have one. I don't go calling my friend names just because he has an Amiga, and he doesn't call me names because I have an ST. We love to COMPARE what we both have, and whenever I go to Houston, he pulls out the latest AMIGA graphics and sound demos, tells me how it multitasks and has great stereo sound.

When he comes to El Paso, I whip out the latest ST graphics demos, show him how I can word process and download files at the same time, and play a few tunes through my MIDI keyboard for him. He leaves with his mind unchanged by my sales pitch, just as I leave with my mind unchanged by his sales pitch. We are still friends. We don't call each other names.

The INFO articles made me think. There are several explanations for an entire magazine to bash the Atari ST. Here are the ones I could think of:

1. The editors and staff of INFO magazine have poor informational sources. The STacy IS coming out. The Portfolio IS coming out. If the folks at INFO don't know this, then the people that gave them the information are poorly informed. I contend the piracy problem is *industry-wide*, not Atari specific.

If you look further into the issue of INFO, there is a regular feature called "COPY CORNER" (page 58), an article that tells you how to use copy programs! Atari pirates? I have never seen a "How to Copy Programs" article in ANY ST magazine.

2. The Amiga community is jealous of the ST and Mega line of computers. They are jealous that the Atari stock is now near $10 a share and rising. They are jealous that Atari is introducing and producing new and exciting computers, while other companies do not. Like a trapped animal, it seems as if the only response is to lash out at the predator. It seems as if Atari is doing some preying, and the prey looks trapped.

They are jealous of a laptop like the STacy, so they misrepresent it to the public. (Put together with a hot glue gun? ha!) They are jealous that Atari has a hand-held PC clone and Commodore does not.

Anyway, I just thought that you, as ST and Mega users should know how we are looked upon in the AMIGA community. Should you like to respond to these gross misrepresentation, address your letters to:

Benn Dunnington
Editor INFO Reader Mail
123 North Linn Street, Suite 2A
IOWA City, IA 52245

Mr. Dunnington "bet his machine" that there would never be a laptop ST...I wonder how we are going to divide that by a few thousand people???

Titan from Titus Software

by Bob Retelle (MACE,WAUG)

I always hate to write a bad review of a game. I've written games myself, and I know how it feels to put your time and energy into writing a game, especially one which has several fairly unique features. But sometimes things just don't come together no matter how unique the features may be. TITAN from Titus Software is one of those games. In a word it's, well, boring.

TITAN is somewhat similar to the Arkanoid/Breakout style of game where you bounce a ball against targets that disappear when they're hit. Like Arkanoid, there are many, many different screens with different layouts of targets and several varieties of targets, some good, some evil. Some targets have to be hit more than once before they disappear, and others change into something else when hit. So far, so good... I like games with a lot of variety in screens and targets (there are 80 screens in all). The graphics are also quite good.

To play the game, you bounce the ball off your "paddle," which in this game is square since you can hit the ball in any direction, not just up as in Breakout. If you're moving slowly, the ball simply rebounds off the paddle at an angle. If the paddle is moving more quickly, the ball passes through it and reverses its original direction. Unfortunately, the game uses the joystick to move the paddle, instead of the more quickly responding mouse. (The game also allows the use of the cursor keys to move the paddle, but that's such a ludicrous situation I won't even mention it!)

The screens consist of patterns of targets and obstacles. To complete a screen, you have to eliminate all the targets or hit the "EXIT" target. Some of the obstacles are completely solid, while some will let the ball pass through but block your paddle, and some are the reverse. Then there are squares that slowly rise out of the "floor" of the screen every time your paddle passes over them, eventually becoming solid obstacles. A few of the obstacles move around, causing the ball to bounce randomly, and just generally get in your way.

Of course, there are also the nasty targets that will do unfriendly things like kill you. If your paddle or the ball touches a white skull, you die. If the ball touches a green skull, you die. You can destroy the green skulls with your paddle, but you have do that while also keeping track of bouncing the ball.

So far, the game sounds pretty good. It begins to run into trouble though with the fact that the actual playing area is much larger than the screen area. This means that the screen must scroll around as you move your paddle to see all of the playing area. Because the ball moves independently, it may go off somewhere other than the area you can see, so there's also a "radar" indicator to show you where it is in relation to where you are.

Now, I like games with scrolling screens and radar indicators. It's just that those "features" don't work very well in this type of game. Because of the somewhat sluggish movement of the paddle, it's difficult to go chasing off after the ball when it disappears off your screen.

Another problem is that much of the time you may have to guard an area of skulls while the ball is off beeping and boinking against targets you can't even see. I don't know about you, but I like to see the action, not just listen to it happening somewhere off-screen.

This game makes it feel more like the computer's having the fun and you're just there to watch. The same "off-screen action" problem makes it awfully hard to aim at anything in the areas you can't see. You just have to hit the ball up there somewhere and hope it hits something. Aiming isn't all that accurate anyway, even when you CAN see the target. It seemed as if I was chasing the ball around rather than playing a game where the object was to actually hit a specific target.

If the ball gets past you, you may end up spending an awfully long time just trying to get it back to where you want it to be. There's an option to slow the ball down by pressing the spacebar or the joystick button, but that only makes it slowly frustrating instead of rapidly frustrating.

The game isn't all that difficult, except for the difficulties created by the lack of control and visibility. I easily reached Level 17 without dying before I decided I had better things to do with my time. The final straw came when the ball got past me for the second time and bounced its way back around a spiral maze that had taken me almost 10 minutes to painfully shepherd it through in the first place. Twice.

If you enjoy high levels of frustration or having the computer play the game for you, you might enjoy TITAN. Otherwise, I'd recommend you find a dealer who will let you playtest it first. You may find, as I did, that Arkanoid or even good old Breakout are more fun.

Millenium 2.2

by Tim Holt (ST of El Paso)

In the mid-seventies, there was a television series called Space:1999, where the commander of a base on the moon watched helplessly as the moon was blown out of the Earth's orbit, and the residents of the moon base had to fend for themselves. Pretty bad acting if I recall, but the IDEA was neat. Now, there is a game that has come out from Europe with a similar theme: Millenium 2.2.

You are the commander of a lunar base that is the last bastion of humanity. Seems as if the old Earth was wasted by a stray asteroid. Now it is up to you to repopulate the solar system. It won't be easy. There are only 100 folks on the moon, and the renegade human outpost on Mars decides that you are going to make good target practice. So, how are you going to do it? That is what Millenium 2.2 is all about!

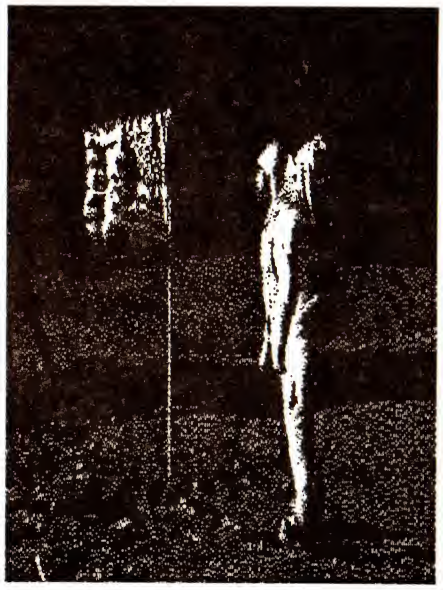
The moon base has six different areas that are under your command: research, energy production, industrial production, living quarters, the launch pad, and defense. By clicking the mouse on any one of these areas, you find out exactly what is going on at that moment.

When the game starts, energy and research are the most important areas, as the game progresses, production and defense gain in importance. All of the areas are important at one time or another, as you must constantly produce items such as energy cells, and must constantly research places where you can make colonies.

It is hard to tell about the game without giving away the secret to success. The ultimate object is to repopulate the Earth by producing a terraformer that can change the toxic atmosphere back into oxygen.

To do this, you must find certain substances such as silver, which are not available on the moon. These substances are available somewhere in the solar system, but you gotta find them. You find them by building probes, and sending them out to look for it. Once you find the stuff, you have to construct colonies there, so mining can take place. To get the items back to the moon, you have to build ships that can ferry the stuff from point A to point B. How you build your ship, and what you consider important is the key to the game. If you chose one thing as being more important, and it isn't, then doom awaits you.

All the while, Mars is attacking you, and your colonies, so you have to build defenses as well as regular ships.



It sounds complicated, and Millenium 2.2 is at first. The instructions are very skimpy, but I found that this ADDED to the tension of the game. I didn't know what was around the corner, and since the instructions didn't help, I had to use my head. (I am not used to this!)

The game switches from graphic adventure to arcade action whenever you are attacked, and that was a nice touch. The graphics are EXCELLENT. I won't spoil them for you. Go buy it and see for yourself.

I did have a few gripes about Millenium 2.2. Once you have finished the game, it is the same every time you play. It then becomes a race to see if you can beat your old time to repopulate the Earth. My best time is 18 years. Everytime you are attacked, the damage is done to the exact same type of equipment. I thought that was a bit unrealistic. The damage would be different each time in a real war. However....

If you judge a game by the amount of time you spend stuck in front of your Atari trying to get it done, then Millenium 2.2 has to be the most successful game I have ever played. I bought the game at 4 in the afternoon, and was stuck in front of my computer until 2 am. My wife threatened divorce during those eight hours, I think, I wasn't paying attention...

Great graphics, a nifty plot, and only minor complaints. Buy it, play it, become addicted, and when you are done, give it to your kids. Tell your wife it was an educational game (It really does have accurate information on the solar system in throughout the game.)...she might fall for it...

BEST Builds a Better Mouse
New Mouse Available for ST/Mega and XL/XE Computers

by Bill Rayl

I've never been totally satisfied with the design or durability of the ST mouse provided by Atari Corp.

On the design side, the ST mouse is a bit too large and oddly shaped for comfortable hours-long usage. As for durability, I've found from my own personal use that an Atari mouse, if cleaned on a regular basis, still ceases functioning properly in less than two years.

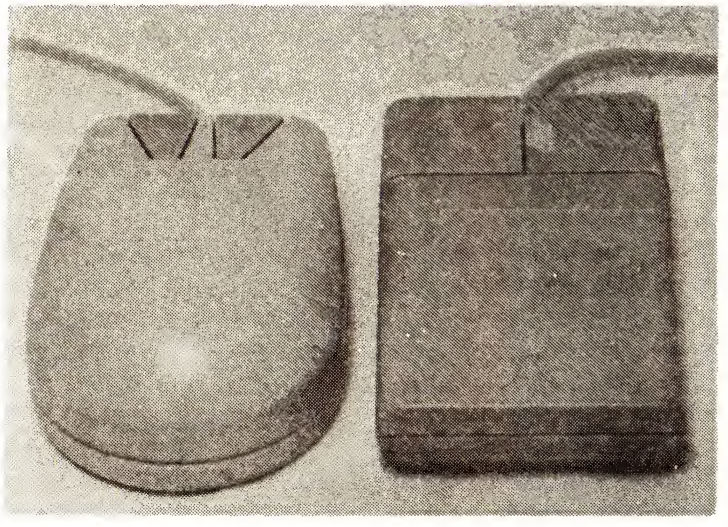
I consider myself an average to heavy user of the ST, putting in at least 20-30 hours per week in front of the computer. In the last three years, I have repaired or replaced the Atari mouse three times. Dungeon Master alone did one of the little rodents in!

Because of the almost constant cleaning, repairing and replacing of the mouse, I had a modified trackball added to my ST system. This solved the durability problem, but a trackball isn't the most comfortable thing to work with after a few hours either.

Add that to the fact that some operations are just plain easier to perform with a mouse than a trackball, and I was looking for a better alternative. I've used the MicroSoft(tm) Mouse on the IBM and I found its design and near maintenance-free operation to be far superior to my Atari's mouse. "Now why hasn't someone produced a mouse this good for the ST?" I asked myself.

Well, now someone has! BEST Electronics of San Jose, California has built a mouse that I believe even puts the MicroSoft(tm) mouse to shame.

Retailing for $49.95, the same price as the Atari mouse, the BEST Mouse is designed with the user in mind. From its sleek design that fits comfortably into your hand to the replaceable teflon "mouse feet" that make the device glide over your computer desk, the BEST Mouse is a joy to use.



No more cramped fingers and tired hands after a few hours of Desktop Publishing! The mouse buttons are responsive and quite firm — much better than the Taiwan- or Korean-produced Atari mice.

The BEST mouse boasts high resolution photo tracking of 200 pulses per inch, making this mouse approximately twice as fast and responsive as the Atari mouse. When using the BEST mouse, you don't need a mouse accelerator!

Not to be outdone by the exterior, a look inside the BEST Mouse instantly shows this mouse lives up to its name. The rollers that contact the mouse ball do not seem to be prone to the dirt build-up you get with the Atari mouse. No more scraping gunk off the rollers each month!

If you're an XL/XE owner using a GEM-like operating system such as Diamond OS, the BEST Mouse offers you an alternative to purchasing an Atari mouse. For a comparable price, the BEST mouse is truly the better buy!

Using the BEST Mouse on my spongy, cloth-covered mouse mat yielded less than satisfactory results. When used directly on my desktop, or on any hard surface, the BEST Mouse performed beautifully. This seems to be because the mouse feet actually lift the mouse slightly from the mat or desk surface, allowing the mouse to skate effortlessly over the desk. Using a spongy mat, the BEST Mouse simply isn't able to glide — sort of like roller skating on a carpet.

If your mouse is on its last legs or you're tired of the constant maintenance and repair of the Atari mouse, take a good look at the BEST Mouse. Chances are you'll decide the BEST Mouse really is the best mouse available for your ST/Mega or XL/XE.

For more information, see your local Atari dealer or contact BEST Electronics (408) 243-6950.

Atari Writer + for Those Who Don't Want to Read the Book -- Part II

by Jimmy Boyce (CACE)

Let's wind up the section on editing with some of those odd ball things that can save you some time and frustration. Like merging a file <pg27>. As editor of the CACE newsletter, I have to merge files a lot and this function has been of great help.

Merging Files Together

If you've seen the three column format of the CACE newsletter, you will notice that two or more unrelated items will fall in a single column. Since the number of contributing reporters has been growing, each article is saved on a disk as a seperate file. But, when printed they must be merged to fill a column. This is what I do to accomplish that feat:

First I load a file, and then I set the cursor to the end of the file with [SELECT][B]. Now, I press [OPTION][L]. In the lower right of the screen is the prompt: FILE TO MERGE. I type in the file name (if the file is on Drive 2, then I preface the file name with D2:) and type [RETURN].

That's it folks, I have just merged a file. When merging files, please make sure that you have enough free memory to make the merge (130XE owners — you cannot merge across memory banks).

Saving Blocks of Text

Another handy little option is the ability to save a portion of a file <pg28>. I don't know if you are like me, but on occasion I get to writing on the old 800 and forget that the file lengths are not as long as they are on the 130XE.

Next thing I know, I am stuck with a file that is too long to save. DO NOT PANIC! (I can say that because I did once, but now I don't.) Place the cursor at the beginning of the part you wish to save.

Remember when we talked about deleting blocks of text? Remember that command [OPTION][B]? Remember how you arrowed down using [CONTROL] [=]? Well that is what you do here until you have got enough highlighted text to make a shorter file.

"OK," you say, "what's next?" Try [OPTION][S]! Check out the lower right-hand side of your screen, it should read — FILE TO SAVE.

What I usually do is give my file a name and number (i.e., D2:TOOLONG1). Then I hit [OPTION] [DELETE/BK SP] and get rid of the saved portion. I repeat this process and save the next part as D2: TOOLONG2 and so forth, until my long file is all saved and I can recall it in logical sequence for hardcopy.

Additional Remarks

For 130XE people, here are a couple of notes: if you load up a memory bank press [START][B] to go to the next bank...you have two more available. It will save across banks and will reload to the same banks.

Let's say you need to add something to the middle of your file. Bank 1 is full, and that is where you need to place the additional information.

Try using [OPTION][F]. This command redistributes the file evenly across the three memory banks and leaves you space to make the insertion in Bank 1.

Put the cursor at the top of Bank 1 before you do it so you know where the cursor is when you are done. The first time I tried it, I had the cursor at the end of Bank 1 and finally found it at the end of Bank 3. Nothing serious, but it was unnerving.

Saving Text as ASCII

This next bit is kind of fun and interesting and, for serious writers or programmers, of great help. You can save your files in ASCII format by going to the Main Menu (by typing an [ESC]), pushing [CONTROL][S] and saving your file in the usual manner.

Now you can send this file via your modem to a friend with a different computer or a different word-processor, and they can receive it without the AW+ control characters. This will save them some time trying to unscramble your file. Make sure that you have deleted all AW+ global print format commands. These commands will screw up your file on any non-Atari program.

Programmers should save their files in the same manner, then ENTER the file into their compiler. Be sure to LIST your program. These files cannot be SAVEd.

Primarily AW+ files are compatable with any DOS 2.0 and 2.5 formated word-processors. So be it with editing. Bye for now.

[Editors' Note: The next installment from Jimmy Boyce will deal with spell-checking your Atari Writer + files. If you have any comments or questions, please share them with us.]

Spitting Image
Monty Python, Here I Come!

by Bill Pike (PAC)

[Review copy loaned by IB Computers. This article originally appeared in the Computer News, published by the Portland Atari Club and the Original Eugene Atari Computer Enthusiasts. Reprinted with permission.]

I was sitting down one evening in a generally foul mood and was sick and tired of the whole world. My generally foul mood was getting deeper so I decided to blow something up. Of course I went to my (Friendly?) computer.

I found something to cure my mood. It was a British game called SPITTING IMAGE. If you like British Humor or "the colonies" TV show "D.C. Follies" or "The Muppet Show" you will love this game. It is destined to become a classic for the ST.

The game package says, "Barry Manilow Free." On the back of the package you will find that "This game is guaranteed to contain no reference to Barry Manilow (except this one) (and the one on the front)."

There is also a "WARNING: DAMAGE" saying "A good way to really damage your cassette or disk is to smear marmalade all over it or leave it overnight in a bucket of creosote."

SAVE THE WORLD

Within the next seven years a world war will take place. A war so great that even the Swiss will get involved this time. A war so terrible the Italians have already surrendered.

One leader will emerge from this war to rule the world. It is your task to stop this leader and SAVE THE WORLD.

That is the title screen, and you are then shown a map of the world and the cursor will identify the various world areas for you.

You will also be shown your antagonists: Grovey Gorby, His Holy Coolness, Ms. T, Ronald MacRegan, Mr. & Mr. Ayotollia, and President Botha who is a very nice man (Report compiled under the South African Reporting Restrictions). You will also be introduced to Her Royal Reffness who will judge all contests.

Pick your champion, pick their antagonist and have at it. You have to defeat all antagonists, totally discrediting them. You will then have to face the Prince in a real mud-slinging contest. When you have successfully completed your task you will be shown who will rule the world.

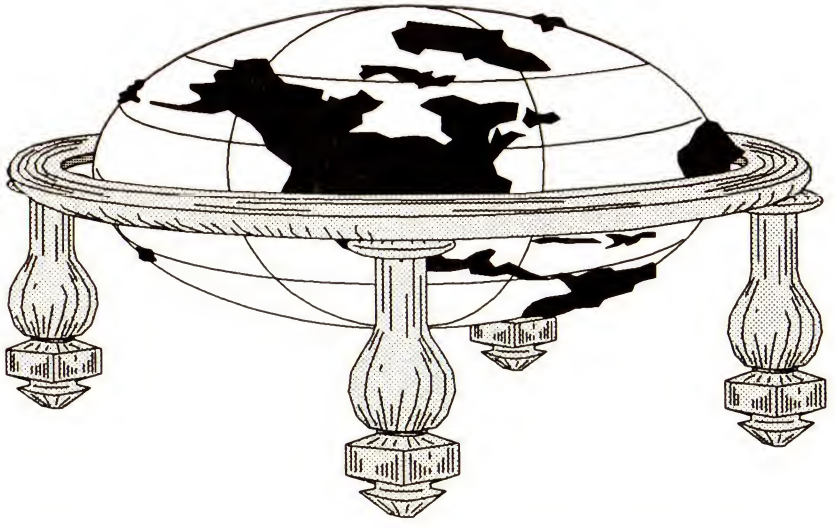
Then, you are told what the instructions are. The game tells you, "This is the most confusing bit. Ronnie got completely lost here and even Maggie took 5 seconds to understand it." Anyhow, you also have a "sidekick" to help you if you need him/her.

The cost of this game is $37.95, why they don't just say $38.00 I still don't know. I know the cost is a might high, but the program is worth it.

This is the best program I have seen in a long time, however I do enjoy Monty Python. The graphics are excellent and watch the background scenes for some surprises during the combat sequences.

I spent about 3 hours playing the game when I first got the disk and this is a record for me. Even my 16-year-old son liked it. My wife hated it...she thought it was silly. She also thinks I'm silly, so take it for what it is worth.

P.S. If you get tired of playing against the computer you can also thrash your best buddy in a two player game. Ta!Ta!



For 520ST. 1040ST, 520STfm and MEGA

MEMORY:

Expand your St's memory to ONE Megabyte, TWO and ONE-HALF Megabytes or even FOUR Megabytes with the tech-specialities plug-in memory modules. All memory boards fit under the R/F shield. The CPU is completely available for any future enhancements (blitter, coprocessors, speedup kits etc.). No soldering is required.

520ST modules use 256K DRAMs for upgrades to 1 MB and 1 Megabit DIPs for 2-1/2 and 4 MB upgrades. All boards are fully socketed and the expandable boards can be configured for either 256K or 1 Mb chips. This means that you can start by upgrading your 520 to one Megabyte and later move up to either 2.5 or even 4 Megabytes--the maximum for any ST, even the Mega! Installation is completely solder-free. Comes with detailed illustrated instructions and a one (1) year limited warranty.

Upgrade your 1040ST or 520STfm just as easily as a 520ST! Send us your 520STfm and we will install the second bank of memory complete for only $269 plus shipping. Or install one of our 1040 memory boards and upgrade your ST to 2-1/2 or even 4 Megabytes.
Limited space above the 1040 mother board prohibits the use of conventional sockets in one bank. Optional "ZERO Height" sockets allow you to have this bank socketed too, so you can plug in or exchange the expensive 1 Mbit chips. The "ZERO-Height" socket kit is also available separately so you can install it at any time!

520A: Socketed, no RAM	$129
520B: 1 MB, socketed	$249
520C: 2.5 MB, socketed	$495
520D: 4 MB	$795
520-1: 1 MB, non-expandable	$199
1040A: 1 Bank sockets, no RAM	$110
1040B: Fully socketed, no RAM	$149
1040C: 2.5 MB + 1 bank sockets	$495
1040D: 4 MB	$795
1040K: Kit w/all parts, no RAM	$ 68
Clock Option on Memory Board	$ 30
Clock, stand-alone for 520/1040	$ 38

We ship COD ($3) or prepaid, sorry no credit cards!
Add the following amounts for shipping and handling:
memory upgrades - host adapters: 1st unit $5, add. u. $2
hard drive kits/CPU cases without drive $10/20, h. d. kits with drive need special shock resistant packacking $20/30
Texas residents add 8% state sales tax.

Above prices correct on 3-22-88. Prices of populated boards subject to chip adjustments to meet fluctuating DRAM prices.

520ST, 1040ST, 520STfm and MEGA are trademarks of ATARI Corp.

EXPANDABLE Hard Drive Kits:

All kits come complete with software and **all** parts needed to get the system **operational**, 1 year ltd. warranty. There are right now four different case styles available:

1. 10"wide x 6.8"high x 15"deep (desktop) with full SCSI interface and 'DMA-through' connector
-150 W PC power supply with fan
-room for up to 5 half-ht hard drives or combination - full/half height
-mounts on floor, under desk or on desktop
-can power up 520ST and external floppy drives.
-optional delay circuit for CPU allows fully automatic power-up!

No Drive--Install your own - $385
10 MB - $485 30 MB RLL - $695
20MB 48 ms - $595 40 MB ST251$795
30 MB f. ht. 45 ms autop. CDC - $745

2. 13.25" wide (same as MEGA) x 15" deep x 3.8"high with full SCSI/DMA through host adapter
-ready for up to 3 1/2 ht or 1 each full/half ht. hard/tape/floppy drives
-55 W power supply with 115V-fan
-can be placed under monitor

No Drives--Install your own $295
10 MB - $395 30 MBCDC - $565
20 MB 48 ms - $525 40 MB ST251$745
65 MB 22 ms autopark RLL drive $845

3. 4.5" wide x 6" high x 13" deep with single port host adapter
-ready for 2 1/2 height or 1 full height drive
-55 W power supply
-optional fan available (add $18)
No Drives--Install your own$249

10 MB - $349 30 MBRLL 48ms - $570
20 MB - $485 40 MB ST251 - $645
63 MB h. ht.22 ms auto parking - $795

4. CPU CASE, 18" wide x 12" deep x 8" high.
Upgrade your 520/1040 to the MEGA standard, separate CPU and keyboard, gain space for 3 each 3.5" and 5.25" half height floppy and/or hard drives in two separate drive bays.
* 150 W power supply with inbuilt fan supplies power for all possible combinations and keeps everything cool.
* a reset button on the keyboard makes a warm reset easy.
* an adjustable circuit delays the CPU on power up, allowing a totally automatic bootup.
* Your monitor can be switched on or off automatically, using an optional cable - complete **One** switch operation for the whole system is possible
* The plane immediately above the ATARI motherboard is reserved for future expansion. A 68020/68881-2 coprocessor board with sockets for up to 8 MB of high speed 32 bit memory is currently being developed.
Kit contains all parts for standard 520ST/1040ST/520STfm, please specify machine type - $295
Hard Drive kits for CPU case:
10 MB - $295 20 MB 48ms - $398
30 MB full ht. CDC 45 ms - $465
Please note that you get back about half of the CPU case costs after buying a Hard Drive Kit.
Host adapter cards are also separately available and come with software, either bare or with case and 6' long round shielded SCSI cable with embedded power supply lines. Up to 20' cable length and additional connectors, made to order available!
Two different types are available, both are full SCSI versions with DMA through connector, the higher priced one has also a real time clock.
Prices after the "/" are for host adapters with cas/cable..

$79/119 with clock - $119/159

Space limitations don't allow a more detailed description. For complete catalog contact:

tech-specialities Co.
909 Crosstimbers, Houston TX 77022
(713)691-4527/8 FAX: (713)691-7009

Distributors for:

Australia
Tech-Soft, 460 Stirling Hwy, Suite 37
Claremont, Western Australia 6011
Tel.: (09) 385-1765

Canada (East)
Computer Country, Paul Wilson
148 Waterloo Street, Stratford, Ont., N5A 4B4, Tel.: (519) 273-1011

West Germany
ING.-B. Dipl. Ing. M. Krompasky
Schillerring 19, 8751 Grosswallstadt
Tel.: (06022) 24405

Cascades Atari Computer Enthusiasts

CACE

Cascades Atari Computer Enthusiasts is the Atari Club in and around the Jackson County area. The main purpose of the club is to help inform new users, and to promote the use of the Atari Computer in the community.

President	Brent Fisher	(517) 764-4599
Vice-President	Tim Hotchkiss	522-8912
Secretary	Joe Cripps	782-0199
Treasurer	Craig Schaff	787-3970

The C.A.C.E. BBS, is run by the club and is open to anyone with a modem. The number to call is 1-517-787-4011. The current membership dues are $14.80 per year, and are payable at any of the C.A.C.E. monthly meetings, or by mail to the P.O. Box. Club membership includes access to the entire club software and publication libraries, along with a monthly published newsletter.

Any written communication with C.A.C.E. should be sent to: P.O. Box 6161, Jackson, MI 49204. Our meetings are held on the second Sunday of the month, from 1 pm to approx. 4 pm. The meetings take place in the basement of the East Side Lounge at 2214 East Ganson, Jackson, Mi.

Fishin' Around by Brent Fisher

Well, it seems that last month people tried to show up for the meeting, only to find a sign that stated that the East Side Lounge would be closed on Sundays during July and August. No one told me that we would not have a meeting place in August. And it seems especially strange since we did have a meeting at the Lounge in July. I would just like to take a moment to apologize to those of you who showed up after I had left, and hence I was unable to make other arrangements with you.

The next bit of business would be the late arrival of our issues of AIM. The editors and publishers of AIM are having a meeting with the principal contributing clubs on the 26th of August. I plan on being in attendance. Hopefully there I can work out something so that everyone gets their magazine on time.

Just so that everyone knows, this month's meeting is scheduled to take place on Sunday, September 10th, it most likely will be held in the basement of the East Side Lounge. I would ask that all interested parties show up as close to 1 pm as possible, this way just in case there is a problem with the meeting place, we can make other arrangements. If anyone has questions or comments, my phone number is published every month at the beginning of our header. By the way, I figure that it might be wise to tell everyone that the October meeting will be on Sunday the 8th, just in case he magazine comes late again.

Now for a bit of Atari news. I called and talked with Atari yesterday, and received some very interesting information. If you would like an inexpensive way to upgrade your disk drive, Atari has a plan for you. Send Atari your old 1050 and $75, along with a note stating that you would like to have a XF551 sent back in it's place. Oh by the way here's the exact address to send your drive, the note, and the money to:

Atari Corporation, Att: Customer Relations, 390 Caribbean Dr., Sunnyvale, CA 94089.

Now for some bad news for those of you who want to get Atari Planetarium, but it looks as though Atari has run out of stock on another good 8bit program. I was told that they have no immediate plans to produce another batch for us program starved hordes in the near future.

One last piece of news concerns Atari's executive revolving door process. It seems that Chris Roberts has left, so by the time you read this user groups will be dealing with another new user group co-ordinator. What does that make this, three or four this year? I don't know, I just don't know.

Anyway, it is time to get this off to AIM, so until next time, Come To The Meeting.

CAPITOL HILL ATARI OWNERS SOCIETY

CHAOS is the Capitol Hill Atari Owner's Society, serving the Atari community of the Lansing, Michigan area. The Campus Hill Atari Owner's Society is the Michigan State University chapter of CHAOS.

Membership dues are $15.00 per year and entitles members to a 1-year subscription to the Atari Interface Magazine, a free disk from our regular library, and access to our libraries and other resources. Dues may be paid at any CHAOS meeting or by mail. If not using an official membership application, please include your name, address, phone and a list of your equipment and interests.

Sysop John Nagy and CHAOS invite you to call one of the country's finest BBSes at 517-371-1106, 300/1200/2400 baud, 24 hours a day (Atascii/Ascii) serving both 8 and 16 bit Atari computers. Send inquiries regarding CHAOS, mail orders, memberships and so on, to:CHAOS, PO Box 16132, Lansing, MI 48901.

General meetings of the membership take place several times a year. 8bit and 16bit Special Interest Group meetings take place monthly. The S.T. INterest Group meets on the second Saturday of the month. The 8bit S.I.G. meeting, for 400/800 and XL/XE owners, takes place on the third Saturday of the month. Meetings begin at 10 a.m. sharp and last until 1 p.m.. Members and guests are welcome to any SIG meeting that interests them.

Illegal copying, or any violation of coyright laws, is not condoned or allowed at any CHAOS-sponsored function, including the club BBS.

GENESEE ATARI GROUP

Serving the Flint area

The Genesee Atari Group is a non-profit group of Atari owners in and around Flint, Michigan. Our purpose is to provide assistance to users of Atari personal computers. This organization is not affiliated with Atari, Inc.

GAG meets on the second Wednesday of the month at the Neithercut school, located at 2818 Crestbrook Drive, Flint. (Off Atherton between Hammerberg and Van Slyke). Meetings begin at 6:30 pm. All are welcome. GAG is a participating member of the Atari Interface Magazine, and members can purchase subscriptions at a greatly reduced rate. GAG is also affiliated with the Great Lakes Atari Digest, and members receive a free subscription with their membership. Membership is $15 per year for the family.

GAG has an exceptional public domain library of 8- and 16-bit software. Contact one of the officers to receive a complete catalog. GAG also has a large magazine library for use by it's members, including Antic, Analog, ST-Log, Start, and several others. We do not support piracy. Piracy is theft!

For more information contact:

The Genesee Atari Group PO Box E Flint, MI 48507

Jerry Cross	President	736-4544
Dave Pettit	Vice Pres.	232-0508
Ed Kalush	Librarian	517-288-4531
Gil Merciez	Librarian	
FACTS BBS		736-3920

GKAUG GREATER KALAMAZOO ATARI USERS GROUP

GKAUG meets on the second Saturday of each month at 11 a.m. in the Dewing Hall, Room 305, on the Kalamazoo College Campus, corner of Academy and Monroe. Dues are $25/yr and include a subscription to Atari Interface Magazine.

President	Frank Fellheimer	657-6106
Vice President	Dan Youngs	
Treasurer	Open	
Archiver	Dave Oldenburg	
Librarian	Bill Berner	
SysOp	Alex Stevens	
GKAUG BBS		(616) 657-2665

Next meeting: Saturday, 09 Sep 1989

We managed to get reservations for room 302 again, but we will be making a final decision at this next meeting if we will be going to Star World for our next meeting in October. The decision will be in October's AIM if you don't happen to make it to the meeting.

It looks as if I will be able to handle the next year as President. I am back to work in my own area. If I don't have to work the overtime, I will be at all the meetings.

Next meeting:

- Discussion of Star World Meetings
- Richmans 80 column word processor: if it comes in.
- 1020 Plotter demos: they are so inexpensive to own now.
- General Discussion: Lots of new items to bring up.
- Looking for officers: it can be you.

See Yah, Frank

Great Lakes Atari ST Support 'GLASS', Michigans only 'ST' only Users Group I ♥ my ST!

Meetings - First Thrusday every month, 6 p.m. to 9:30 p.m., Athens High School, 4333 John R, Troy, Mi., 1/10 north of Wattles <17 Mile> - Room 1528 - Mailing Address - P.O. Box 99737, Troy, Mi. 48098 Phone - (313) 828-1653 after 4 p.m. - Steve Mileski, president

Dues - $1.00 per month, ie: join in April - pay $9.00, all memberships expire on January 1, each year. Non-members welcome at no charge.

For Sale:
Each only $15

Space Station Oblivion
Titan from Titus
Gold of the Realm

Call (313) 973-8825

GRASS GRAND RAPIDS ATARI SYSTEMS SUPPORTERS

Next Meeting: Wednesday, October 4th, 6:30 p.m. Wyoming Public Library, 3350 Michael S.W.

Tim Feenstra	President	(616)784-6230
5625 Buthview NE, Comstock Park, MI 49321		
Greg Williams	Vice President	(616)698-7319
George Nosky	Treasuer	(616)942-1527
Bob Bulliment	Secretary	(616)457-1766
Chuck Baughman	Librarian	(616)795-7373
Terry Reine	Membership	(616)698-7244

President's Monthly: 17 August, 1989

Hi all, it is good to be back at the keyboard after a prolonged absense.

How have you all been since my last entry? I hope you have had a good a summer as I have. My computer useage the past couple of months have been on a PC trying to get several C.N.C. (computerized numerical control) machines all hooked up to a single PC to allow the use of a new CAD/CAM package. There are still a couple bugs in some of the connections, but all in all the system works well.

Now to old trusty... My Atari has had it very easy this summer, but now that things are slowing down, I hope to give it some of those long workouts that keep it (and me) active till all hours of the night.

I have not bought anything new so far this summer with the exception of a second XF551 drive, so I don't have to much to share with you until I get back into the swing and find out what all you have been doing and any new pieces that you've added to your collection.

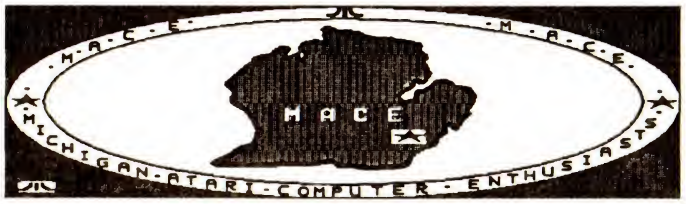
Shortly after the September meeting, I am planning an officers meeting to get some sort of agenda for upcoming topics and demos. If you have any ideas for the demos, or have something new that you would like to demo, let me know about it and we'll try to get it in. Let's not be shy, I am sure that many of you have items that would make great demos.

One more item, Terry Reine has moved to Ohio. He has taken a promotion into the marketing field of the retail company that he works for. Good luck Terry, we wish you every success in your new job.

This leaves us in need of a new Membership Chairman. If anyone is interested, get in touch with me and the job is yours.

Come to the October meeting

Tim



Michigan Atari Computer Enthusiast members receive, as part of their dues, Atari Interface Magazine, a monthly magazine keeping them informed of what is new in MACE and the whole Atari community. Members are also entitled to purchase disks from the 8bit and ST public domain software libraries. 8bit disks are $3 each and ST disks are $4 each, and if you buy three disks from either library and you can choose a 4th disk absolutely FREE! Non-members may purchase disks at a slightly higher rate. Mail order is also available. For a catalog of current disks in our libraries, send $2 for either an ST or 8bit catalog to the MACE address below. Please indicate ST or 8bit when sending in your order.

The most important benefit you receive is the help and support from (and interaction with) other Atari owners. If you're having a problem, need advice about a software package or whatever, your fellow MACE members can and will help. That's what a user group is all about -- helping each other get the most from our computing.

MACE meets on the third Tuesday of each month from 7:30 to 10 pm in Room 115 of the Southfield Civic Center at 10-1/2 Mile and Evergreen Roads.

MACE can be contacted at PO Box 2785, Southfield, MI, 48037 or by calling Bill Rayl at (313) 973-8825 or Bob Retelle at (313) 483-7358.

Any MACE member who contributes an article which appears in Atari Interface Magazine is entitled to a free disk from the library of his/her choice.

MACE BBS Numbers:

MACE WeST	(313)582-0657	(3/12/2400)
MACE East	(313)978-1685	(3/1200)
The College Board	(313)478-9647	(3/12/2400)
DownRiver Outpost	(313)675-4660	(3/12/2400)
Molin's Den	(313)420-0407	(3/1200)

August Meeting Minutes

The meeting got off to a late start, with the night's first order of business dealing with Jerry Cross's loss of equipment at the Michigan Atari Computer Expo. After a lengthy discussion, the majority of members present voted to reimburse Jerry for his insurance deductable.

President Bill Rayl and Meeting Coordinator Bob Retelle then lead a discussion of recent events in the Atari world. They talked about the Atari revolving door, talked about a ST virus epidemic and the cancellation of prominent AtariFests on the West Coast.

Bob Retelle then talked about the upcoming elections in September and named those lucky MACE members who have been (unknowingly) nominated for officership. Remember, MACE needs your help to keep the club alive! (Volunteer before you are volunteed!) Nominations so far include: Bill Boles, Jim Samples, Kip Keifer, Harry Price, Gordon Totty, Bob Retelle, Brian Wilmoth and Frank Alexander.

Next on the agenda was a talk about hard drives from ST Librarian Ed Hanson. He talked about the utilities available for hard drive owners like FatSpeed, Turtle, Unturtle, DL2 and T_restore. These public domain files are available in the MACE ST library; they are disks U28 and U33.

The next meeting is September 19, and we will have a guest speaker from MichTron!

The ST Club of El Paso is the only Atari ST and Mega user group in the El Paso area. Founded in 1988, The ST Club has distinguished itself as great help to those that are new to Atari computing as well as helping those that are old "hacks" at computing.

Meetings of the ST Club are held on the second Saturday of each month at the Richard Burges Branch Library, 9300 Diana. Meeting time is 12:30pm. Each meeting features demonstrations of the latest in software, and help for those that are having problems with particular programs.

Membership in the ST Club of El Paso includes the following benefits: A one year subscription to Atari Interface Magazine, discounts on computer supplies and software at Jenkins' Computer Store, discounts on services at local merchants, access to a huge PD file area, access to the ST Club area on STEP BBS, technical assistance, regular club auctions and social events. Voting membership is only $20 a year! (A great deal, when you consider that a subscription to AIM alone is $18!) Sponsored memberships are $15 a year, and newsletter only memberships are also $15.

To become a member of the ST Club of El Paso, call 915-821-2048, or write to: The ST Club of El Paso 10953 Yogi Berra El Paso, Tx 79934.

President:	Tim Holt	(915) 821-2048
Vice President:	Morris Miller	594-1906
Sec't/Tres:	Joann Anderson	751-2710
Editor:	Paul Stampfli	821-4861
Librarian:	Norm Bates	593-6234

From the Prez...

I hope that you noticed the changed look of our newsletter! The members decided at the August 12 meeting to adopt Atari Interface as the official newsletter of our club. I think this gives us a more professional look and takes a burden off Paul. So, let me know what you think of our new "baby" at the next meeting.

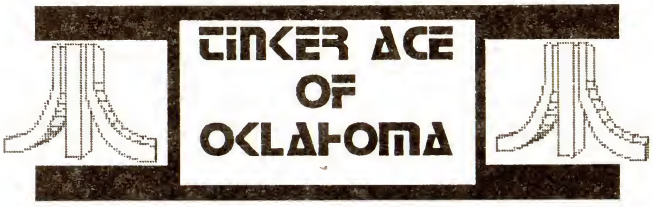
Here is a quick rundown of what happened at the August 12 meeting: Paul Stampfli demo-ed HABA's Home Accountant. Probably the only decent program that came out of that defunct company. (I know, the program is old, but it is really neat!)

The club business discussed included: Adoption of AIM as our newsletter, possible second meeting per month (this looks like it might be the last Tuesday evening of each month, or possibly just SIGs meeting at various people's homes), selling raffle tickets for the $50 gift certificate to Jenkins' (drawing to be held at the September meeting), newsletter was distributed, the two new types of membership rates (sponsored and newsletter only), and a discussion on what the club wants to see in the future.

Four new members joined at the August meeting: Clarence Klaassen Jr., Billy Corbett, Mike McCown, and John And Pat Hawley. We wish to welcome them to our club.

The September meeting will feature a demonstration/lesson of how to run ArcShell 1.99, as well as a new game. Arcshell is a very important program for the ST, and if you are new to the club and the Atari, this is the meeting to be at! The raffle for the $50 gift certificate will be drawn, and the door prize this month is the latest album by Tangerine Dream, composed entirely on the Atari ST. I hope all of you can make the meeting September 9th.

Until next month, enjoy the new newsletter! Tim



TACE -- Tinker ACE of Oklahoma meets the first Saturday of each month at 1pm (12:30 set up time) in the Moore Public Library, 225 South Howard, just off of SW4th and I-35 in Moore. TACE can be contacted at Route 5, Box 539, Blanchard, OK 73010 or at the TACE BBS (405) 755-9561, 24hours., 3/12/2400 baud, running Oasis 4.3 software with over 60megs of online storage, ST & 8bit support. Dues: Full - $20.00, Correspondence - $15.00.

President	Michael Beard	(405) 793-7978
Vice President	Greg Ray	(405) 964-3765
Sec/Treasurer	Stephen Moffitt	(405) 732-8449
Librarian	Greg Yelle	(405) 390-9184
BBS SysOp	Rick Spencer	
Technical Advisor	Ron Hamilton	(405) 387-5649

Secretary/Treasurer Report-July 1989

Okay folks, this was one of the most exciting times of the year. The volunteers for the various offices were pressed into service!

And here they are...

Greg Ray volunteered to be the President for the next year, Ron Hamilton volunteered (was volunteered?) to be the Technical Advisor (you would have called him for all those little problems anyhow...), Chris Hamilton is the new 8-Bit librarian, the vice-president is doing a repeat performance, and me as Secretary/Treasurer.

The new address for all Tinker A.C.E. correspondence is:

104 E. Northrup

Midwest City, OK 73110-5226

SpartaDOS X was shown at the meeting and no bugs were seen beyond those explained in the documentation.

Don't forget, Tinker A.C.E. dues ar now due (of course, if you are reading this, you probably have already payed them), the dues are prorated at $1.25 a month for correspondence membership and $1.66 a month for full membership.

August — Nice meeting

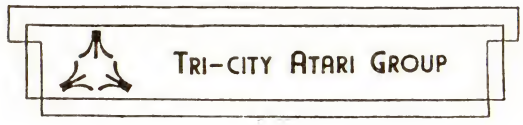
Both president and vice-president brought their ST's as well as one 8bit.

A survey was taken by Greg L. Ray as regards the club...he also gave out a printed copy of all the many Print Shop (tm) icons that he personally has.

We are currently payed up on all bills (except Puget Sound Atari News) at this time.... If you want a subscription to Puget Sound Atari News, you may get it through the club (me) for $ 1.08 an issue.

Please encourage your friends to come to the next meeting, we should have a demonstration of the Express cartridge (by Keith Ledbetter) by Advengar of Timewarp BBS at the September meeting (which, by the way, should be the second Saturday of September, rather than the first Saturday).

Stephen C. Moffit



The Tri-City Atari Users Group meets the last Saturday before the 18th of the month, at 2pm at the Rudy Zauel Memorial Library, on the corner of Center and Shattuck in Saginaw Township. Upcoming meetings are September 16th, and October 14th, 1989. Officers:

President	Steve Volker	(517) 793-2955
ST Librarian	LeRoy Valley	686-6796
Treasurer/Sec'y	Marty Schmidt	792-6029
8 Bit Librarian	Ted Beauchamp	686-8872

Club dues are still only $20.00, which provides support for both the 8 Bit and ST, and full access to the club's PD library, along with a year's subscription to the Atari Interface Magazine. Check your mailing label, if you need to renew.(or haven't joined us yet!). DO IT NOW!

First Up

I would have to guess that ever since the days of 1K, gaunt, keyboardless computers, whenever a group or 'club' of individuals had agreed to come together on a regular basis, the president or chairman of that group invariably found it necessary to "chastise" the members for poor attendance records. (Especially during the summer months.) I would also hazard a guess that very few of these impassioned pleas were the least bit effective, so I think I'll skip mine. One small point though. I think it is interesting to note that the number of topics discussed at the August meeting outnumbered the number of members present. Hmmm...

Remember! Re-Up, then Show Up!!

What You Missed

Listening to LeRoy Valley demo a LAZER 'C' debugger, doesn't necessarily sound like the most exciting way to spend an afternoon, but even a program-specific tutorial, in the hands (and mouth) of an expert, can be very entertaining. Especially with the little side remarks and devastating mini product reviews which seemed to spring up unbidden as Mr. Valley deftly takes whatever application he is demoing through it's paces. No one walks away without learning something.

The tabled discussion on how much to charge for copies of club disks was reopened this month. After a brief flurry of comments and suggestions all around, a motion was brought to the floor by LeRoy Valley, that the cost for DS disks should be $5 per and the cost of SS disks should be $3 per, for disks purchased from the club with library software on it. Bryant LeFreniere seconded and the motion was passed.

Bryant also confirmed that he would be demoing Migraph's Touch Up and Hand Scanner combo, at the October meeting. He said anyone who wishes to bring something in to be scanned into an IMG. (like old photographs, hand drawings, etc.) should feel free. He will try to get to everyone.

The Forum on membership drives will be reopened at the September meeting. A number of negative comments were heard about AIM's recent inability to get us our "newsletter" on time

(i.e. before the meetings), and also in reference to the seemingly counter-productive denials, explanations, and defensive rhetoric which have continued to fill the pages of the magazine, almost since it's inception, concerning the split with John Nagy et al. It is suggested that you make a point to attend the next few meetings, in order to have a voice in any upcoming decisions that may have to be made.

(Presidential Note: There is a General Order meeting between the AIM's staff and participating Users Group representatives scheduled for the 26th of August in the AIM offices. Topics to be addressed are magazine content and club participation, among other things. Our concerns will be voiced at this meeting also, and a full report will be presented at our next meeting.)

What You Shouldn't Miss

Steve Volker will be showing off SHADOWGATE by ICOM Simulationsand MINDSCAPE, and explain why it is a Moral Imperative to own this game! (By the way, what IS that THING on the front of the box? Look for a demo of Fast Technologies new 16 mhz upgrade board soon, and see CMI's version, with a socket for the BLITTER chip, in person! (And For Sale?) The 8bit section is on hold temporarily, until some 8bitters, besides Ted Beauchamp, decide to SHOW UP!

BOTH MasterCad (by Michtron), and Speller Bee (by First Byte), are available for members who wish to take them home and explore them for a month. Ask STEVE or LEROY...

On Another Note

The Fall Consumer's Showcase at Fashion Square Mall will be coming up soon, and we've been invited! We need to start making a list of volunteers who will bring and man their machines at this event. LET'S HAVE A GOOD SHOWING!

Equipment Volunteers for September:
Steve Volker - ST System
Ted Beauchamp - 8 Bit System
Remember, if your bringing equipment, please bring all necessary cables, (i.e. power cords, monitor cables, mouse, or whatever.)

Looking for Public Domain Software? MACE has it!
Over 300 disks in the ST Library
and 400 disks in the 8bit Library!
Only $4 each for ST
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The August meeting was held Tuesday, 8/8 in the Wolverine Room at the Michigan Union. President Craig Harvey called the meeting to order promptly at 7:30pm, as promised. He immediately suggested that intermission take place at the beginning rather than the middle of the meeting so he could dash home and get his ST monitor since there was no telling when V.P. Rick Schrader would arrive with the club monitor.

Guest speaker Ed Hanson, of Hurricane Systems, hosted a very informative discussion about hard drives for the ST. Ed described the various hardware/ software options available to persons who wish to assemble their own system, and then went on to show some of the formatting/partitioning software from ICD.

Member Mike Pieronek described some of the pitfalls of installing a hard drive internally in his Mega 2, and then proceeded to show how well it worked while running the Spectre 128 Mac emulator. The ensuing Q&A session was quite lively and eventually ended with a discussion centering on the uncertain release of TOS 1.4 for the end user.

Craig announced the September meeting feature topic will be "Utilities" and October will be "Emulators" where we will be showing the Spectre GCR and PC Ditto II (assuming they are available by then).

Mike Pieronek noted that he had tried to order his Spectre GCR earlier in the day and had been told that orders were only being taken every other day and that he'd have to call back again! Who would have guessed that Gadgets By Small would have gotten so finicky about taking money from the adoring public?

ST Librarian Russ Crum announced a new update to the catalog disk which may be purchased for $2 or traded for a previously-purchased disk. Russ also had a special package of two disks containing a variety of hard-drive-related items from formatting programs to 40-folder-fixes to backup and restore systems.

8Bit Librarian Mike Millage had some bundles left over from previous meetings and also announced a new catalog disk would be available at the October meeting. There are now nearly 240 different disks available in the 8Bit library.

The meeting was adjourned at 9:30pm.

Michael Olin

REVOLUTIONARY NEW PRODUCT

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REQUIRES at least 1 meg. of RAM
(or a Megadisk or Polydisk Cartridge)

- Imagine Saving almost any game at any point, then being able to return there as many times as you like.
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- Imagine Instantly switching back and forth between two different programs, games, utilities or business applications.

Now Stop Imagining and get Switch/Back.
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Switch/Back is a revolutionary new hardware and software package that lets you get more from your ST, MUCH MORE.

Switch/Backs gaming features lets you instantly save most games then continue playing. If you get in trouble you can switch back to where you were as many times as you like.

BACK-UPS –Switch/Back can work with your favorite back-up program and allow you to save whole protected disks to files for archival purposes. It can also automatically unprotect a program and save it as standard file. This method works on hundreds of ST programs and it allows you to run the files directly. Its perfect for running protected programs off a hard disk. It creates standard TOS files, that can be stored together on disks or even transferred by modem.

SWAP – Switch back lets you load just about any two programs into your ST and switch instantly between them. It works with games, business programs, utilities, compilers, etc. Although only one program is running at a time, the other is available instantly, right where you left off.

The Switch/Back hardware plugs into your printer port for easy use (It has a pass through connection for your printer too.)

Switch/Back requires at least One Meg of memory (Or a Polydisk or Megadisk) **ONLY $69.95**

ST Protection Techniques

Finally ST Copy protection techniques are revealed. This complete book and disk package details the state of the art in ST Protection methods and much, much more.

The Software included with the book provides many powerful features like the AUTOMATIC PROGRAM PROTECTOR. This easy to use Utility allows you to protect just about any ST program. You can choose a combination of protection methods like encryption, checking custom disk formats, password protection or a limited use option that makes the program self-destruct after running a preset number of times.

The book includes topics such as Phreaking, Logic Bombs, Hardware data keys, the legal aspects of piracy and software protection, Custom disk formats, Pirate Bulletin boards and much more.

In addition it contains reviews of the popular ST back-up programs and detailed explanations of ST disks and drives.

ST Protection Techniques (Book and disk package) **Only $39.95**

DigiSound ST

High Quality sound digitizer for the ST. This powerful hardware and software package lets you sample real world sounds and play them back on any Atari ST. Add special effects like Echo, Reverse, looping, pitch manipulation, mixing and envelope control. Turns your Atari keyboard into a musical instrument to play songs with your digitized sounds (also works with any MIDI keyboard). Digisound makes it simple to add sound to your own program, too! Unleash the incredible sounds in your ST with DIGISOUND. Supports sampling from 5 to 40Khz, DIGISOUND is the choice of the professionals. DIGISOUND was used to create the voice in Chessmaster 2000, and other commercial programs. **ONLY $89.95**

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Is It a Drum Machine? A sequencer? A new concept in digital sound? The answer is - YES!! It's all this - and so much more!! It's a polyphonic song construction set that turns your ST into a drum machine and digital sequencer. Now anyone can be a master composer. No musical knowlege required!

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DIGISPEC Is an exciting new breakthrough in computer video digitizing. **DIGISPEC** works with your Color ComputerEyes to create **spectacular 512 color** video images. Now you can capture and display video pictures in unsurpassed detail and clarity, with 512 different colors on your ST screen.

DIGISPEC is easy to use. It works on any ST computer. Simply capture an image with your Color ComputerEyes and color video camera (or VCR, video disk, etc.). Then run **DIGISPEC**, and watch as your picture appears in a full rainbow of 512 true colors.

DIGISPEC includes a special shading feature to give you even more detail and color. The shading feature uses a technique called dithering, which creates and displays images in 3,375 or even 24,389 simulated colors.

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Polydisk is a 512K version of a Megadisk. Polydisk gives you the same fast boot features, the high speed access, and the print spooler. Polydisk has a power supply (like Megadisk) but does not contain a battery back-up.

Note: Those with only 512K of main memory can use Switch/Back with a Polydisk, just like those with one Meg.

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September 1989 Events Calendar

SUN	MON	TUE	WED	THU	FRI	SAT
					1	**TACE** 2
CIS 8bit CO 10PM 3	4	Delphi CO 10PM 5	**GRASS** GEnie ST CO 10PM 6	**GLASS** GEnie 8bit CIS ST 10PM 7	8	**GKAUG** **ST Club of El Paso** 9
CACE CIS 8bit CO 10PM 10	11	**WAUG** Delphi CO 10PM 12	**GAG** GEnie ST CO 10PM 13	CIS ST & GEnie 8bit CO 10PM 14	15	**CHAOS** **TAG** 16
CIS 8bit CO 10PM 17	18	**MACE** Delphi CO 10PM 19	GEnie ST CO 10PM 20	CIS ST & GEnie 8bit CO 10PM 21	22	23
CIS 8bit CO 10PM 24	25	Delphi CO 10PM 26	GEnie ST CO 10PM 27	CIS ST & GEnie8bit CO 10PM 28	29	30

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ATARI

BRAND NEW ITEMS

$199.95 The "BLACK BOX"!© $199.95

The **Black Box** is a device for your XL or 130XE computer that adds tremendous power to your 8-bit Atari. It has two buttons, two switches, and a set of dip switches visible from the outside. It plugs directly into the back of the 600XL, 800XL, and 130XE computers. Custom cases may be an optional expense. The **Black Box** performs three main tasks: interface to a SASI/SCSI bus device (hard disks), Parallel printer port, and a RS232 port. A fourth option, available soon, will be a floppy disk port, especially useful to XF-551 owners. The SASI/SCSI port provides the necessary signals for hooking up most common hard disks. You may partition your hard disk into as many drives as you wish; up to 9 can be accessed at at time. By pressing one of the buttons on the **Black Box**, you will enter the configuration menu, where you can re-assign drive numbers, etc. When you exit, you will be right back in the program you were running when the switch was pressed. Each hard disk can be write-protected. The Parallel Printer port will allow you to hook up any printer that uses the standard Centronics interface. As an option, you can use the computer's extra memory as a printer buffer, or order the **Black Box** with 64K of on-board RAM. You may assign printer number and line-feed options within the menu (for use with multiple printers). Another amazing feature of the **Black Box** is the built-in screen dump. By pressing a button (on the box), the contents of your screen will be dumped to your printer (you can define text or graphics modes with a switch)! The RS232 port supplies the full RS232 spec signals for connection to a modem, or another machine (for null-modeming). The handler for the **Black Box**' s modem port is built in and takes up NO memory! The port handles rates up to TRUE 19.2K BAUD! A future upgrade for the **Black Box** is a floppy disk interface board. This will allow the addition of up to four 5.25" or 3.5" mixtures of floppy drives to be used with the system. The drives will act like standard single/enhanced/double density disk drives, but MUCH faster! All drives will be Super Archiver compatible, and support up to 2 sides of 80 tracks. Along with this hardware upgrade will come software capable of reading, writing, and formatting disks in IBM's MS-DOS format and the Atari ST format, and allow you to transfer files between those disk formats and the Atari's format. In addition , a machine language monitor has been added to allow memory disassembly, memory/register changes, and more. The Price of the **Black Box** is $199.95 for the basic unit and $249.95 with 64K of RAM (for printer spooler) plus $8 for S/H/I.

$199.95 The "MULTIPLEXER"!© $199.95

This device brings the power and flexibility of larger systems to your 8-bit. The **Multiplexer** is a device (actually a collection of modules) that allow up to 8 Ataris to read and write to the same drive (typically a hard disk), printer, and talk to each other. One "master" computer (any 8-bit) is equipped with the master **Multiplexer** interface. Then up to 8 "slave" computers can hook up to the master, each having their own slave interface. The "common" peripherals (things that are to be shared) are connected to the master computer. On each slave, all disk and printer I/O is routed through the master, so no drives are needed on them. The master computer can be configured in any manner you wish - you can for example have certain peripherals "local" to the slave, or routed to a different number on the master. Under development is a BBS system that will make full use of this device, allowing up to 8 lines/users to be using the system at the same time! A mutluser chat mode is a feature of this program, however, you do not NEED this program to run a BBS with the **Multiplexer** (but be warned that not all BBS programs will run concurrently). All slaves are independent, and do not need to have the same program running on them. This system is excellent for BBS SysOps, because you can be using your hard disk(s) while still running your BBS uninterrupted! Another example is in a classroom situation, or anywhere a disk needs to be shared by different people. This is an EXCELLENT programming/debugging tool as well! The **Multiplexer** price is $199.95 for a master and two slave units (plus $5 S/H/I). Additional slave units are $69.95 each.

$149.95 The "SUPER E-BURNER"!© $149.95

This device plugs into your Atari's cartridge port, allowing you to program PROMs or EPROMs. (EPROM stands for Erasable Programmable Read-Only Memory.) A PROM is a type of integrated circuit that will store information permanently. This is what is used in cartridges, and even in the computer to hold the operating system program. The **"Super E-Burner"** will program the following chips: 2732, 2764, 27128, 27256, and 27512 PROMs/EPROMs, with any suffix. The burner will let you make multiple copies, read data, burn from a file, etc, but does so EXTREMELY fast! It can fully burn and verify a 27128 in 15 seconds. Also under development is a gang-burner module for the **"Super E-Burner"**, allowing it to program up to 8-chips at a time, with this same insanely-fast speed! The **"Super E-Burner"** sells for $149.95. A deluxe version capable of programming 1 MEG EPROMs is available for $179.95. Add $5 for S/H/I

$99.95 The "POWER PLUS"!© MEMORY UPGRADE $99.95

(for 800XL'S and 130XE's only)

C.S.S. has made the **"Power Plus"!** memory upgrades available on an "unadvertised" basis to our regular patrons. These upgrades have become so popular we are now making them available to everyone! For those of you unfamiliar with **"Power Plus"!** upgrade, it is the most COMPATABLE upgrade available for the 800XL or 130 XE. All other upgrade kits have some degree of INCOMPATABILITY with certain software programs. C.S.S. studied this problem and developed the **POWER PLUS** upgrade which, to the best of our knowledge, appears to be 100% compatible. To upgrade a 130XE to 320K is only $99.95. To upgrade an 800XL to 320K is only $149.95 (circuitry from a 130XE is actually transplanted into the 800XL). Add $5 for S/H/I. C.S.S. will install these upgrades for only $20 if you wish.

$39.95 The SIO "POWER BOOSTER"!© $39.95

Weak data signals are often the problem of errors in data transmissions, especially when working in High or Ultra Speed modes! Long cables, modems, interfaces, and other devices that draw their power from the computer rather than having their own power supply often degrade the waveform of the signals between your computer and other peripherals, sometimes resulting in errors. The **SIO Power Booster Cable!** will amplify the signal to and from your computer 20 to 100 times providing perfect square-wave data transmissions regardless of peripherals used . The **"SIO Power Booster" Cable!** looks like a standard SIO cable and simply plugs into your computer! Only $39.95 plus $5 S/H/I.

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The new **SUPER ARCHIVER**, obsoletes all copying devices currently available for the **ATARI 1050!** It eliminates the need for Patches, **PDB** files, Computer Hardware, etc. Copies are exact duplicates of originals and will run on any drive; without exaggeration, the **SUPER ARCHIVER** is the most powerful **PROGRAMMING/COPYING** device available for the 1050! Installation consists of a plug-in chip and 6 simple solder connections. Software included. Features are:

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- **DISPLAYS HIDDEN PROTECTION**
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- **AUTOMATIC/PROGRAMMABLE**
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(for ATARI 1050 drives)

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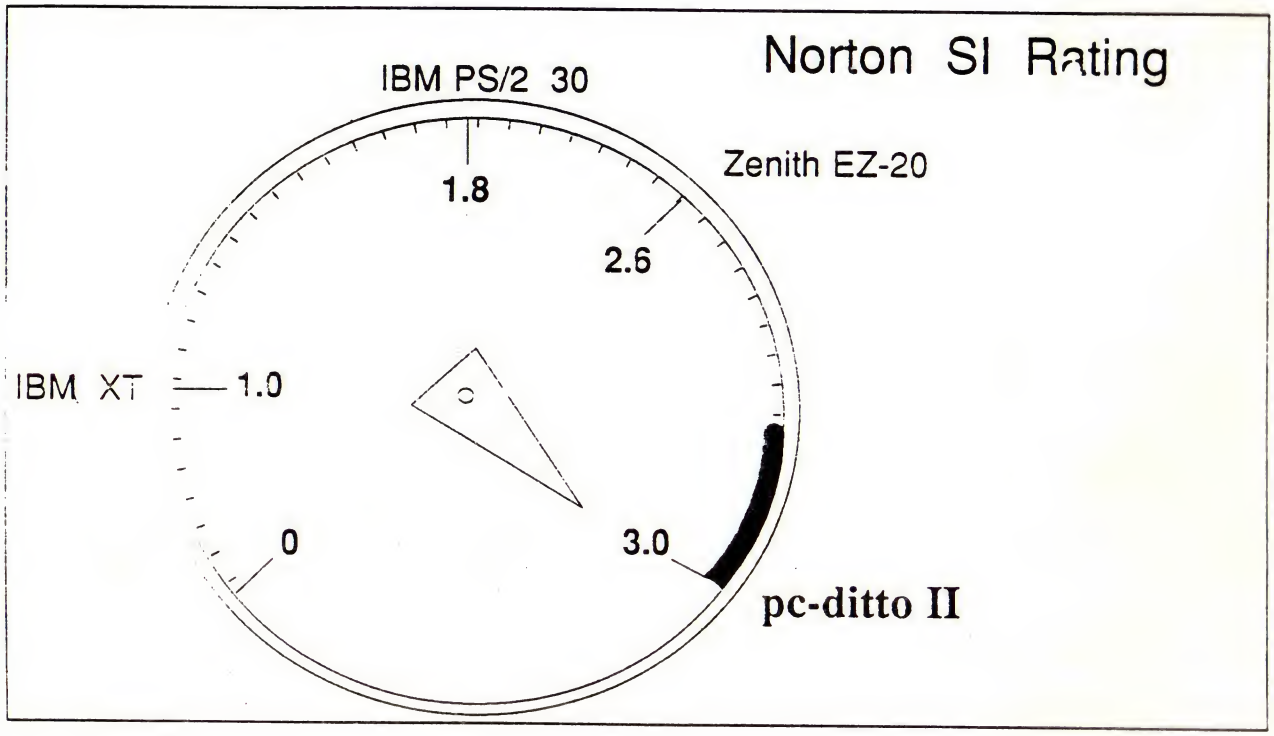

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